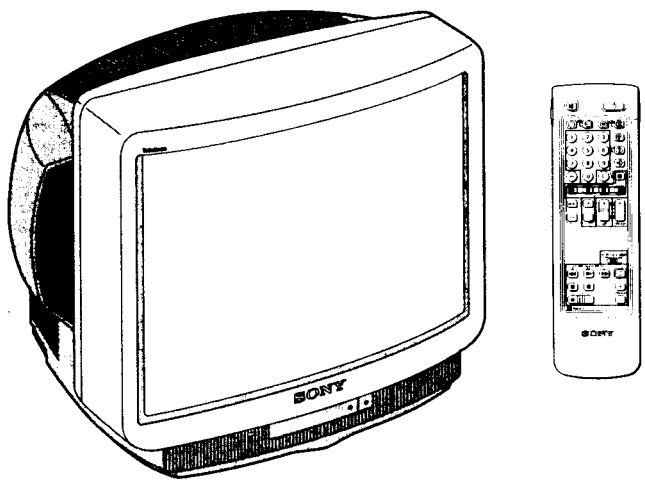
# SERVICE MANUAL

# BE-3B CHASSIS

| MODEL | COMMANDER | DEST. | CHASSIS NO. | MODEL | COMMANDER | DEST. | CHASSIS NO. |
|---|---|---|---|---|---|---|---|
| KV-X2901D | RM-833 | AEP | SCC-G77B-A | KV-X2903E | RM-833 | Spanish | SCC-G82BA-A |
| KV-X2901A | RM-833 | Italian | SCC-G81B-A | KV-X2902L | RM-833 | IRISH | SCC-G83B-A |
| KV-X2900B | RM-833 | French | SCC-G85B-A | KV-X2902U | RM-833 | UK | SCC-G87B-A |
| KV-X2901B | RM-833 | French | SCC-G84B-A | KV-X2901K | RM-833 | OIRT | SCC-G86A-A |




MICROFILM

TRINITRON® COLOR TV

SONY®

| ITEM MODEL | Television System | Stereo System | Channel Coverage | Color System |
|---|---|---|---|---|
| AEP | B/G/H, D/K | GERMAN Stereo | PAL B/G/H VHF:E2-E12 UHF:E21-E69<br>CABLE TV (1):S1-S41<br>CABLE TV (2):S01-S05, M1-M10, U1-U10<br>ITALIA VHF:A-H2 (C) UHF:21-69<br>D/K VHF:R01-R12 UHF:R21-R69 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| Italian | B/G/H, D/K | GERMAN Stereo | ITALIA VHF:A-H2 (C) UHF: 21-69 PAL<br>B/G/H VHF:E2-E12 UHF:E21-E69<br>CABLE TV (1):S1-S41<br>CABLE TV (2):S01-S05, M1-M10, U1-U10<br>D/K VHF:R01-R12 UHF:R21-R69 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| French | B/G/H, D/K L, I | GERMAN Stereo | L VHF:F02-F10 UHF:F21-F60<br>CABLE:B-Q B/G/H VHF:E2-E12<br>UHF:E21-E69<br>CABLE TV (1):S1-S41<br>CABLE TV (2):S01-S05, M1-M10, U1-U10<br>ITALIA VHF:A-H2 (C) UHF:21-69<br>I UHF:B21-B69 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| Spanish | B/G/H, D/K | GERMAN/NICAM Stereo | PAL B/G VHF:E2-E12 UHF:E21-E69<br>CABLE TV (1):S1-S41<br>CABLE TV (2):S01-S05, M1-M10, U1-U10<br>ITALIA VHF:A-H2 (C) UHF:21-69<br>D/K VHF:R01-R12 UHF:R21-R69 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| Irish | I | NICAM Stereo | VHF A-C, D-J, VHF 21-69<br>CABLE CHANNELS S1-S20<br>HYPERBAND S21-S41 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| UK | I | NICAM Stereo | UHF : B21-B69 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| OIRT | B/G/H, D/K | GERMAN Stereo | B/G/H VHF:E2-E12 UHF:E21-E69<br>CABLE TV (1):S1-S41<br>D/K VHF:R01-R12 UHF:R21-R69 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |

| MODEL | AEP | Italian | French Text | French Non Text | Spanish | Irish | UK | OIRT |
|---|---|---|---|---|---|---|---|---|
| Power Consumption | 108W | 108W | 108Wh | 108W | 108W | 156W | 156W | 108W |

## SPECIFICATIONS

Picture Tube — Hi-Black Trinitron
Approx. 72 cm (29 inches)
(Approx. 68 cm picture measured diagonally)
110° -deflection

**Input/Output Terminals**

**[REAR]**

- 1 21-pin Euro connector (CENELEC standard)
  - inputs for audio and video signals
  - inputs for RGB
  - outputs of TV video and audio signals
- 2/S 2 21-pin Euro connector
  - inputs for audio and video signals
  - inputs for S video
  - outputs for audio and video signals (selectable)

**[FRONT]**

- 3 Video input - phono jack
- 3 Audio inputs - phono jacks
- S 3 S video input 4-pin DIN
- Ω Headphone jacks : stereo minijack

| | |
|---|---|
| Sound output | 2 x 20W (Music power) |
| Power requirements | 220 - 240V |
| Dimensions | Approx. 656x566x518 mm |
| Weight | Approx. 45kg |
| Supplied accessories | RM-833 Remote Commander (1)<br>IEC designation R6 battery (1) |
| Other features | NICAM , FASTEXT, TOPTEXT. |

**[RM-833]**

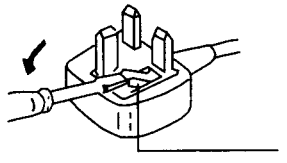
| | |
|---|---|
| Remote control system | infrared control |
| Power requirements | 1.5V dc<br>1 battery IEC designation<br>R6 (size AA) |
| Dimensions | Approx. 65x225x21 mm (w/h/d) |
| Weight | Approx. 157g (Not including batteries) |

**Design and specifications are subject to change without notice.**

| Item \ Model name | KV-X2901D | KV-X2901A | KV-X2900B | KV-X2901B | KV-X2903E | KV-X2902L | KV-X2902U | KV-X2901K |
|---|---|---|---|---|---|---|---|---|
| Pal Comb | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| PIP | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| RGB Priority | OFF | ON | ON | ON | OFF | OFF | OFF | OFF |
| Woofer Box | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| | | | | | | | | |
| Scart 1 | ON | ON | ON | ON | ON | ON | ON | ON |
| Scart 2 | ON | ON | ON | ON | ON | ON | ON | ON |
| Front in (3) | ON | ON | ON | ON | ON | ON | ON | ON |
| Scart 4 | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| Projector | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| AKB in 16:9 mode | ON | ON | ON | ON | ON | ON | ON | ON |
| Norm B/G | ON | ON | ON | ON | ON | OFF | OFF | ON |
| Norm I | OFF | OFF | OFF | OFF | ON | ON | ON | OFF |
| Norm D/K | ON | OFF | OFF | OFF | OFF | OFF | OFF | ON |
| Norm AUS | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| Norm L | OFF | OFF | ON | ON | OFF | OFF | OFF | OFF |
| Norm SAT | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| Norm M | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| Teletext | ON | ON | OFF | ON | ON | ON | ON | ON |
| Nicam Stereo | OFF | OFF | OFF | OFF | ON | ON | ON | OFF |
| Language Preset | Deutch | Italian | French | French | Spanish | English | English | OIRT |

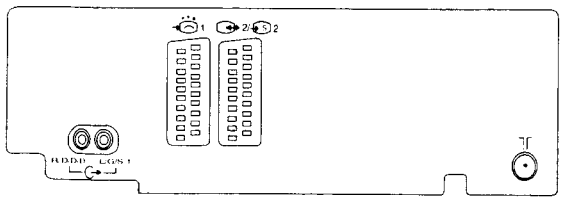
## WARNING ( KV-X2902L / KV-X2902U only )

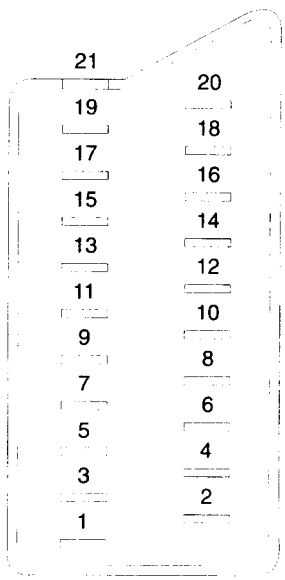
The flexible mains lead is supplied connected to a **B.S. 1363** fused plug having a fuse of **5 AMP** capacity. Should the fuse need to be replaced, use a **5 AMP FUSE** approved by **ASTA** to **BS 1362**, ie one that carries the ASTA mark.
IF THE PLUG SUPPLIED WITH THIS APPLIANCE IS NOT SUITABLE FOR YOUR SOCKET OUTLETS IN YOUR HOME. IT SHOULD BE CUT OFF AND AN APPROPRIATE PLUG FITTED. THE PLUG SEVERED FROM THE MAINS LEAD MUST BE DESTROYED AS A PLUG WITH BARED WIRES IS DANGEROUS IF ENGAGED IN A LIVE SOCKET OUTLET.
When an alternative type of plug is used it should be fitted with a **5 AMP FUSE**, otherwise the circuit should be protected by a **5 AMP FUSE** at the distribution board.




How to replace the fuse.
Open the fuse compartment with the screwdriver blade and replace the fuse.

## 21 pin connector ( 1 2 / 4 )

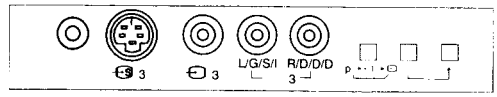





| Pin No. | 1 | 2 | 4 | Signal | Signal level |
|---|---|---|---|---|---|
| 1 | ○ | ○ | ○ | Audio output B (right) | Standard level : 0.5V rms<br>Output impedance :Less than 1kohm* |
| 2 | ○ | ○ | ○ | Audio input B (right) | Standard level : 0.5V rms<br>Output impedance :More than 10kohm* |
| 3 | ○ | ○ | ○ | Audio output A (left) | Standard level : 0.5V rms<br>Output impedance :Less than 1kohm* |
| 4 | ○ | ○ | ○ | Ground (audio) | |
| 5 | ○ | ○ | ○ | Ground (blue) | |
| 6 | ○ | ○ | ○ | Audio input A (left) | Standard level : 0.5V rms<br>Output impedance :More than 10kohm* |
| 7 | ○ | ● | ● | Blue input | 0.7 ± 3dB, 75 ohms, positive |
| 8 | ○ | ○ | ○ | Function select (AV control) | High state (9.5 - 12V) : Part mode<br>Low state (0 - 2V) : TV mode<br>Input impedance : More than 10k ohms<br>Input capacitance : Less than 2nF |
| 9 | ○ | ○ | ○ | Ground (green) | |
| 10 | ○ | ○ | ○ | Open | |
| 11 | ○ | ● | ● | Green | Green signal : 0.7 ± 3dB, 75 ohms, positive |
| 12 | ○ | ○ | ○ | Open | |
| 13 | ○ | ○ | ○ | Ground (red) | |
| 14 | ○ | ○ | ○ | Ground(blanking) | |
| 15 | ○ | — | — | Red input | 0.7 ± 3dB, 75 ohms, positive |
| | — | ○ | ○ | (S signal) croma input | 0.3 ± 3dB, 75 ohms, positive |
| 16 | ○ | ● | ● | Blanking input (Ys signal) | High state (1 - 3V) Low state (0 - 0.4V)<br>Input impedance : 75ohms |
| 17 | ○ | ○ | ○ | Ground(video output) | |
| 18 | ○ | ○ | ○ | Ground(video input) | |
| 19 | ○ | ○ | ○ | Video output | 1V ± 3dB,75ohms,positive sync:0.3V(-3+10dB) |
| 20 | ○ | — | — | Video input | 1V ± 3dB,75ohms,positive sync:0.3V(-3+10dB) |
| | — | ○ | ○ | Video input Y (S signal) | 1V ± 3dB,75ohms,positive sync:0.3V(-3+10dB) |
| 21 | ○ | ○ | ○ | Common ground (plug, sheild) | |

○ Connected ● Not Connected (open) * at 20Hz - 20kHz

| Pin No | Signal | Signal level |
|---|---|---|
| 1 | Ground | |
| 2 | Ground | |
| 3 | Y (S signal) input | 1V ± 3dB 75 ohm , positive Sync. 0.3V -3/+10 dB |
| 4 | C (S signal) input | 0.3V ± 3dB 75 ohm , positive Sync. |



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**CAUTION**

**SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP.**

WARNING !!

AN ISOLATING TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD, DUE TO A LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARKED ! ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLIMENTS PUBLISHED BY SONY.

**ATTENTION**

**APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.**

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENTION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÈ LORS DE TOUT DÈPANNAGE. LE CHÁSSIS DE CE RÈCEPTEUR EST DIRECTEMENT RACCORDÈ Á L'ALIMENTATION SECTEUR.

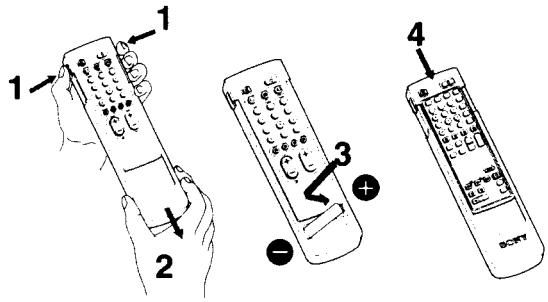
ATTENTION AUX COMPOSANTS RELATIFS Á LA SÈCURITÈ !!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ! SUR LES SCHÈMAS DE PRINCIPE, LES VUES EXPLOSÈES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÈCURITÈ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÈRO DE PIÈCE EST INDIQUÈ DANS LE PRÈSENT MANUEL OU DANS DES SUPPLÈMENTS PUBLIÈS PAR SONY.

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

# Getting Started

## Inserting the Battery Into the Remote Commander




Remove the cover.

Check the correct polarity.

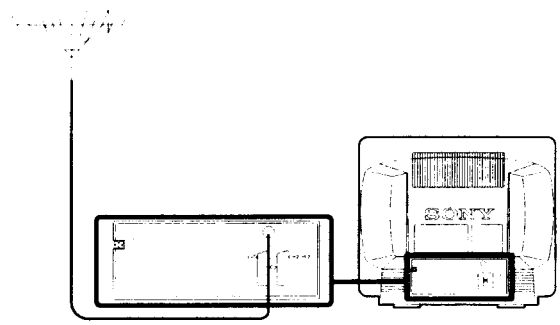
Refit the outside cover making sure that the Full Function side is visible.

### About Battery Life

Under normal operation, a battery will last up to half a year.

## Connecting the Aerial

Connect aerial to the ⊤ socket at the rear of the TV. (cable not supplied)



## Choosing a Language

**(See inside of front cover and back cover)**

**1 Depress ⏻ A on the TV.**
The TV turns on. If the standby indicator B on the TV is lit, press ▢ 3 or any number button 4 on the Remote Commander.

**2 Press MENU 7 on the Remote Commander.**
The SELECT LANGUAGE screen appears.

MENU

**3 Press one of the colour buttons 17 on the Remote Commander to select a language (Press the white button 17 to display other language alternatives).**
The SELECT LANGUAGE screen clears and all subsequent menus appear in the chosen language.

SELECT LANGUAGE

- ENGLISH
- DEUTSCH
- FRANÇAIS
- ITALIANO
- MORE

SELECT COL. BUTTON

**Note:** From the second time when you turn on the TV, the MENU screen appears instead of the SELECT LANGUAGE screen. Press the yellow button 17 then press the white button 17 to redisplay the SELECT LANGUAGE screen.

## Tuning in to Channels

You can tune in up to 60 channels to programme positions either automatically or manually.

auto tuning: A single button press allows all receivable channels to be tuned. Use if you are unfamiliar with the channel numbers of stations.

manual tuning: Use if you are familiar with the channel numbers of stations.

Choose the more appropriate way for you.

### Tuning in to Channels Automatically

There are two possibilities for auto tuning;

**A.** On the TV: hold down ▶▶□ E on the front of the TV for 2 seconds

or

**B.** On the Remote Commander: as follows

**1 Press MENU 7.**

**2 Press the white button 17.**

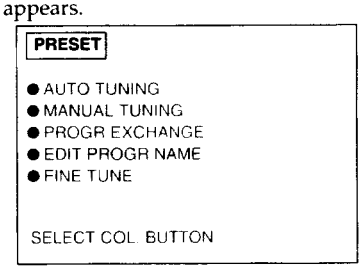
**3 Hold down the red button 17 for 2 seconds,**

**Note:** Press the green button 17 to cancel.

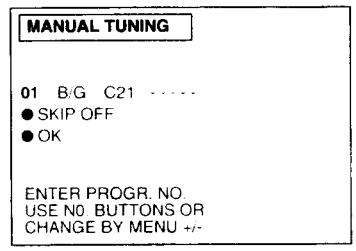
## Tuning in to Channels Manually

**1** **Press MENU [7].**
The MENU screen appears.

**2** **Press the white button [17] to select PRESET.**
The PRESET screen appears.



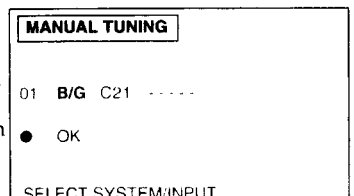

**3** **Press the green button [17] to select MANUAL TUNING.**
The MANUAL TUNING screen appears.




**4** **Press the number buttons [4] or MENU+/– [9] to select a programme position.**
If you use the number buttons [4], enter a double-digit number. (e.g. for programme number 4, first press 0, then 4)

**5** **Press the green button [17].**

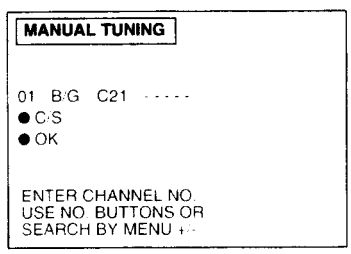
**Note:** Use MENU +/– [9] to select TV system. You can alternatively select input sources which may be assigned to programme positions. The display changes as follows:




B/G ⟷ D/K ⟷ AV1 ⟷ RGB ⟷ AV2 ⟷ YC2 ⟷ AV3 ⟷ YC3

**6** **Press the green button [17].**

**Note:** If a video input source is selected in step 5, this is now stored. Refer to step 4 to tune other programme positions.




**7** **When you have slected B/G, press the red button [17] to select C (regular channel) or S (cable channel).**

**8** **Press the number buttons [4] or MENU+/– [9] to select the channel number.**
If you use the number buttons [4], enter a double-digit number. (e.g. for channel 23, first press 2, then 3)

**9** **Press the green button [17] to store.**

**Note:** If you want to preset other channels, repeat steps 4 to 9.

**10** **Press MENU [7] twice to return to the normal screen.**

**Note:** You can skip unused programme positions when selecting programmes with the PROGR +/– buttons [18]. Press the red button [17] to skip in step 4. However, the skipped programmes may still be called up when you use the number buttons.

# Basic TV Operations

## Turning the TV on and off

**Turning on**
Depress ⏻ [A] on the TV.

**Turning off temporarily**
Press ⏻ [10] on the Remote Commander.
The TV enters standby mode and the standby indicator [B] on the front of the TV lights up.

**Turning on again**
Press ▢ [3], PROGR+/– [18], or one of the number buttons [4] on the Remote Commander.

**Turning off completely**
Depress ⏻ [A] on the TV.
**Note:** It is recommended to use ⏻ [A] to turn off the TV. This could help you save energy.

## Selecting TV Programmes

Press PROGR+/– [18] or press number buttons [4].

**To select a double-digit number**
Press -/-- [5], then the number buttons [4].

## Adjusting the Volume

Press ◿+/– [19].

## Muting the Sound

Press 🔇 [1].
To resume normal sound, press 🔇 [1] again.

## Displaying the On-screen Indications

Press ⓘ [14] once to display the on-screen indications.
Press again to make the indications disappear.

## Operating the TV Using the Buttons on the TV

With the buttons on the TV, you can adjust or select the functions as follows:
Press ◿+/– [D] to adjust the volume.
Press P+/– [C] to select programme numbers or to turn the TV on from the standby mode.
Press ⏎ [F] to select the input source.
Press ⏭ [E] to preset channels automatically.

# Advanced TV Operations

## Operating the Menu System

You can adjust picture and sound, preset channels to programme positions and utilise other convenient features by using the following menu system.

| Press; | | to; |
|---|---|---|
| 1 | MENU [7] | enter the MENU screen |
| 2 | a colour button [17] | select an item you want to change (The selected item is marked by a triangle.) |
| 3 | MENU+/– [9] | change (or adjust) the contents of the item |
| 4 | MENU [7] | return to the MENU screen |
| 5 | MENU [7] again | return to the normal screen |
| Press MENU [7] once or twice whenever you want to return to the normal screen. | | |

**Note:** When selecting menus, the picture becomes darker. If, however, an item in the PICTURE ADJUSTMENT menu is selected, normal level of TV picture is restored to allow the best adjustment.

## Adjusting the Picture and Sound

Although picture and sound are adjusted at the factory you can adjust them to suit your own taste.

**1 Press MENU [7].**
The MENU screen appears.

**2 Press the red button [17] to select PICTURE or the green button [17] to select SOUND.**

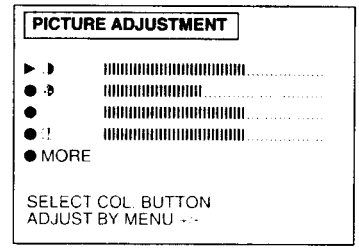
**3 Press the respective colour button [17] to select an item.**

**4 Press MENU +/– [9] to adjust.**

**5 Press MENU [7] twice or wait until the menu displays disappear automatically to return to the normal screen.**

### PICTURE ADJUSTMENT

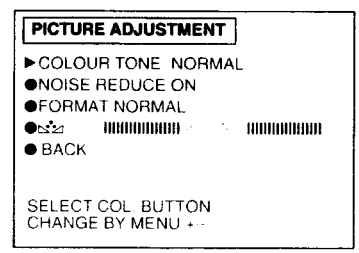
(First Page)




| Press colour button | Effect |
|---|---|
| **Red:** For Picture ◑ | Less —I— More |
| **Green:** For Colour ◕ | Less —I— More |
| **Yellow:** For Brightness ○ | Darker —I— Brighter |
| **Blue:** For Sharpness ◫ | Softer —I— Sharper |
| **White:** | Next page of PICTURE ADJUSTMENT |

### PICTURE ADJUSTMENT

(Second Page)

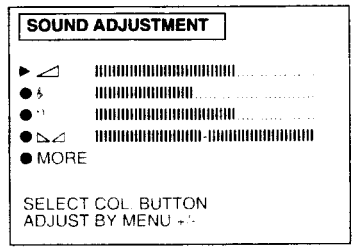



| Press colour button | Effect |
|---|---|
| **Red:** For Colour Tone | Normal -> Warm (reddish colour tone) -> Cool (blueish colour tone) |
| **Green:** For Noise Reduce | ON: Reduces picture noise (in case of low signal level) OFF: Normal setting |
| **Yellow:** For Format | Normal: Normal setting 16:9 Wide screen effect |
| **Blue:** For Hue control (only for NTSC video signals) | Reddish —I— Greenish |
| **White:** | Back to first page of PICTURE ADJUSTMENT |

**Note:** Press [8] on the Remote Commander to reset to the factory preset levels for picture and sound.

## SOUND ADJUSTMENT

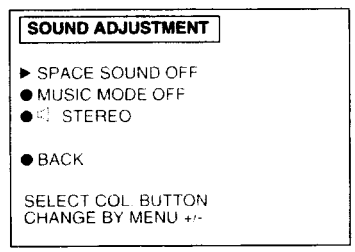
(First Page)




| Press colour button | Effect |
|---|---|
| **Red:** For Volume | Less —\|— More |
| **Green:** For Treble | Less —\|— More |
| **Yellow:** For Bass | Less —\|— More |
| **Blue:** For Balance | More left - more right |
| **White:** | Next page of SOUND ADJUSTMENT |

## SOUND ADJUSTMENT

(Second Page)




| Press colour button | Effect |
|---|---|
| **Red:** For Space Sound | OFF: normal sound<br>ON: for a special acoustic sound effect |
| **Green:** For Music Mode | OFF: normal sounds<br>ON: when listening to music broadcast |
| **Yellow:** For Stereo: | Stereo -> Mono A (left channel) - > Mono B (right channel) -> Mono |
| **White:** | Back to first page of SOUND ADJUSTMENT |

**Note:** Press ↩ 8 on the Remote Commander to reset to the factory preset levels for picture and sound.

# Using Special Features

With your TV you can utilise special features such as Parental Lock or Sleep Timer .

**1** **Press MENU 7.**
The MENU screen appears.

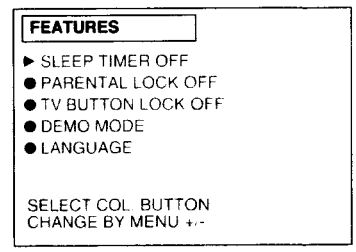
**2** **Press the yellow button 17 to select FEATURES.**

**3** **Press the respective colour button 17 to select an item.**

**4** **Press MENU +/- 9 to change.**

**5** **Press MENU 7 twice or wait until the menu displays disappear automatically to return to the normal screen.**

## FEATURES




| Press colour button | Effect |
|---|---|
| **Red:** For Sleep Timer (Automatic switch off function) | OFF -> 0:30 -> 1:00 -> 1:30 -> 2:00 (hours)<br>After the selected time the TV set switches itself automatically into standby mode. |
| **Green:** For Parental Lock (For preventing children from watching programmes which you consider unsuitable) | OFF: Normal setting<br>ON: The TV-channel you are watching is now blocked. In this way you can prevent undesirable broadcasts from appearing on the screen. |
| **Yellow** For TV Button Lock | OFF: Normal setting<br>ON: The buttons on the TV do not function anymore.<br>(The Remote Commander still operates) |
| **Blue:** For Demo Mode | ON: A sequence of menu pictures is displayed.<br>Press any button on the Remote Commander to stop the function. |
| **White:** For Language | The SELECT LANGUAGE screen appears. |

# Advanced Presetting Functions

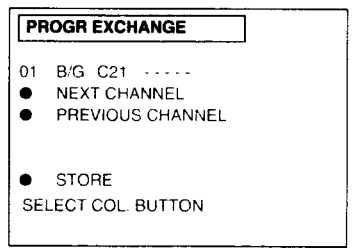
## Exchanging Programme Positions

You can exchange the programme positions to a preferred order (example: exchange programme 09 (channel C21) with programme 15 (channel C24)).

**1** **Press MENU [7].**
The MENU screen appears.

**2** **Press the white button [17].**
The PRESET screen appears.

**3** **Press the yellow button [17].**
The PROGR EXCHANGE screen appears.




**4** **Press the white button [17] repeatedly until the desired programme number (09) appears.**

**5** **Press the red or the green button [17] repeatedly until the desired channel number (C24) appears.**

**6** **Press the white button [17] to store.**
Now the exchange has been completed. Channel C24 is tuned in to programme 09 and channel C21 is tuned in to programme 15.

**7** **Press MENU [7] twice to return to the normal screen.**

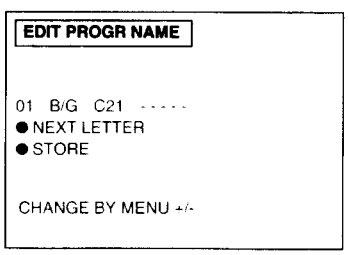
## Editing Programme Names

You can edit the programme names up to five letters.

**1** **Press MENU [7].**
The MENU screen appears.

**2** **Press the white button [17].**
The PRESET screen appears.

**3** **Press the blue button [17].**
The EDIT PROGR NAME screen appears.
The first character flashes.




**4** **Press MENU+/– [9] to edit the first letter.**
The first letter changes as follows;

A ⟷ B ⟷ . . . ⟷ Z ⟷ 0 ⟷ 1 ⟷ . . . ⟷ 9 ⟷ "–" (space)

**5** **Press the red button [17] to move to the next letter.**

**6** **Repeat steps 4 to 5, until the fifth letter is chosen.**

**7** **Press the green button [17].**
The programme name is stored, and the normal screen appears. To edit another programme name, repeat steps 1 to 7.

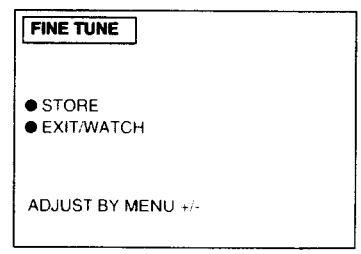
## Fine Tuning

You can adjust the receiving condition by the FINE TUNE function.

**1** **Press MENU [7].**
The MENU screen appears.

**2** **Press the white button [17].**
The PRESET screen appears.

**3** **Press the white button [17] again.**
The FINE TUNE screen appears.




**4** **Press MENU+/– [9] to adjust the receiving condition.**

**5** **Press the red button [17] to store the adjustment, or press the green button [17] not to store.**
Then the normal screen appears. If you have pressed the green button, the fine tuned condition is cancelled once you choose another programme.

## Tuning in to a Channel Temporarily

You can tune in to a channel temporarily, even when it has not been preset.

**1** **Press C [16] on the Remote Commander. For cable channels, press C [16] twice.**
The indicaton "C" ("S" for cable channels) appears on the screen.

**2** **Enter a double-digit channel number using the number buttons (e.g. for channel 23, first press 2, then 3).**
The channel appears.
However, the channel is not stored.

# Teletext Operation

TV stations broadcast teletext programmes via the TV channels. For basic operation of teletext, use the simple side of the Remote Commander. For the advanced features of teletext, use the buttons indicated in green on the full function side of the Remote Commander.

## Basic Teletext Operation

### Switching Teletext on and off

**1 Select the channel which carries the teletext service you wish to view.**

**2 Press ▤ 11 to display Teletext.**
If no teletext signal is broadcast, the indication P100 is displayed on a black screen.

**3 Input three digits for the page number using the number buttons 4.**
The numbers are displayed on the screen and the requested page appears in a few seconds.
**Note:** If you make a mistake, type in any three digits, then re-enter the correct page number.

**4 Press ▢ 3 to return to the TV mode.**

**Note**: To change the teletext channels. First press ▢ 3 to return to the TV mode, then repeat steps 1 to 3.
**Note:** If the signal of a TV channel is weak, teletext errors may occur.

## Advanced Teletext Operation

### Using Fastext

With Fastext you can access pages with one button press. When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue buttons 6 on the Remote Commander.
Press the corresponding colour button 6 on the Remote Commander which corresponds to the colour-coded menu. The page will be displayed in a few seconds.

### Requesting the Index page

Press ▤ 17. The Index page appears.

### Accessing the next or preceding page

Press ▤ (PAGE +) or ▤ (PAGE –) 18. The next or the preceding page appears on the screen.

### Superimposing the teletext display on the TV picture

Press ▤ 11 once if you are in text mode or press ▤ 11 twice if in TV mode.
To return to the normal teletext display press ▤ 11 again.

### Preventing a teletext page from being updated or changed

Press ▤ (HOLD) 2. The HOLD symbol (▤) appears on the screen and the selected subpage is held until you press ▤ 11 to cancel.

### Enlarging the teletext display

Press ▤ 13 once to enlarge the upper half. Press twice to enlarge the lower half. Press again to restore the normal display.

### Revealing concealed information (e.g. answers to a quiz)

Press ? (REVEAL) 14. The information is revealed. Press ? 14 again to conceal the information.

### Watching TV while waiting for a requested page to be displayed

**1 Request a new teletext page.**

**2 Press ⊠(TEXT CL) 12.**
The TV programme is displayed and the symbol ▤ is displayed at the top of the page.
**Note:** When the requested page is available the page number is displayed at the top of the screen.

**3 Press ▤ 11 to view the page.**

**Note:** To cancel the request
Display the teletext page, then press ▤ 11. The request is now cancelled. Press ▢ 3 to resume TV mode.

### Using the Favourite Page system

You can store up to four of your favourite teletext pages per programme with the help of the Favourite page system. In this way you have quick access to the pages you watch frequently.

### Storing the Favourite Pages

**1 Select the page you would like to store using the number buttons 4.**

**2 Press ⇨ 15 twice.**
The colour prompts at the bottom of the screen flash.

**3 Press any of the colour buttons 6 on the Remote Commander to store the selected page.**
The page is now stored on this button.

Repeat steps 1 to 3 for the other 3 pages available.

### Displaying the Favourite pages

**1 Press ⇨ 15.**

**2 Press the colour button 6 corresponding to the colour prompt onto which the desired page is stored.**
The page is requested. (It may take a few seconds to be received).

**Note:** Step 1 must be taken before every favourite page selection, otherwise the normal Fastext facility operates.

### Using the Time Function in the TV mode

Press ▢ 12 to request the time. Press again to cancel the request.
**Note:** This function is available only when teletext is broadcast.

# Connecting Other Equipment

You can connect optional audio/video equipment to this TV such as VCRs, video disc players, cameras or stereo systems.

| Connector | Acceptable input signal | Available output signal |
|---|---|---|
| 1 M (AV1/RGB) | Audio/video and RGB signal | Audio/video signal from TV Tuner |
| 2/S2 L (AV2) (YC2) | Audio/video and S video signal | Audio/video signal from selected source |
| 3/3 G H (AV3) | Audio/video signal and | No outputs |
| 3/S3 G I (YC3) | Audio/S video signal | |

To watch a video input picture, press 2 until the desired video input appears.
To return to the normal TV picture, press 2 repeatedly or press 3.

**Note:** If you have a decoder, connect it to 1 M.

## Connecting a VCR Using the TV Aerial Terminal

Connect the aerial output of the VCR to the aerial terminal K of the TV. It is recommended to tune in the VCR signal to programme number "0". For details, see "Tuning in to Channels Manually" on page 18.

**Note:** S video input (Y/C input) I L
Video signals may be separated into Y (luminance or brightness) and C (chrominance) signals.
Separating the Y and C signals prevents them from interfering with each other and therefore improves the picture quality (especially luminance). This TV is equipped with 2 video input terminals through which these signals can be input directly.

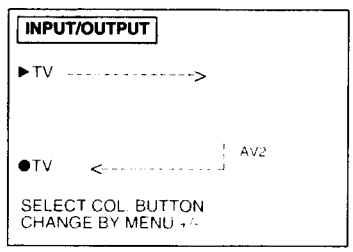
# Checking and Selecting the Input and Output Sources Using the Menu

You can display a menu screen to see which input and output source are selected. You can also change the selection using this menu.

## Checking the Input and Output Sources

**1** **Press MENU 7.**
The MENU screen appears

**2** **Press the blue button 17 to select INPUT/OUTPUT.**
The INPUT/OUTPUT screen appears.




## Selecting an Input Signal

Press the red button 17 to select INPUT. Press MENU +/- 9 to select the desired input source.
You can select among the following sources:

TV ⇔ AV1 ⇔ RGB ⇔ AV2 ⇔ YC2 ⇔ AV3 ⇔ YC3

## Selecting an Output Signal

The 2 /S2 connector L outputs the source input from the other connectors. Press the green button 17 to select OUTPUT. Press MENU +/- 9 to select the desired output source.

You can select among the following sources:

TV ⇔ AV1 ⇔ AV2 ⇔ YC2 ⇔ AV3 ⇔ YC3

**Note:** Press MENU 7 twice or wait until the menu displays disappear automatically to return to the normal screen.

# Remote Control of Other Sony Equipment

You can use the TV Remote Commander to control most Sony remote-controlled video equipment such as: Beta, 8mm or VHS VCRs or video disc players.

## Tuning the Remote Commander to the equipment

**1** **Set the VTR 1/2/3 MDP selector 20 according to the equipment you want to control:**
VTR 1: Beta or VCR
VTR 2: 8mm VCR
VTR 3: VHS VCR
MDP: Video Disc Player

**2** **Use the buttons 21 to operate the additional equipment.**

**Note:** If your video equipment is furnished with a COMMAND MODE selector: set this selector to the same position as the VTR 1/2/3 MDP selector on the TV Remote Commander.
**Note:** If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate.
**Note:** When you use the ● (record) button, make sure to press this button and the one to the right of it simultaneously.

# Using Headphones

You can utilise headphones. Connect them to the headphone jack J, then the sound from the speakers goes off.
**Note:** You can't control the sound adjustment except for volume.

# For your information

## Troubleshooting

Here are some simple solutions to problems which may affect the picture and sound.

**No picture (screen is dark), no sound**

- Plug the TV in.
- Press ⏻ A on the TV. (If the standby indicator B is lit, press ▭ 3 or any number button 4 on the Remote Commander.)
- Check if the selected video source is on.
- Turn the TV off for three or four seconds and then turn it on again using ⏻ A.

**Poor or no picture (screen is dark), but good sound**

- Press MENU 7 to enter the MENU screen, and press the red button 17, then adjust ◑ and ○.

**Good picture but no sound**

- Press 🔊+ 19.
- If 🔇 is displayed on the screen, press 🔇 1.

**No colour for colour programmes**

- Press MENU 7 to enter the MENU screen, and press the red button 17, then adjust ◕.

**Remote Commander does not function**

- Replace the battery.

If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.

## Specifications

**Television system** B/G/H, D/K

**Colour system** PAL, SECAM
NTSC 3.58 (video input only)
NTSC 4.43 (video input only)

**Channel coverage** See "Receivable Channels and Channel Displays"

**Picture tube** KV-X2501:
Hi-Black Trinitron
Approx. 63cm (25 inches)
(Approx. 60cm picture measured diagonally)
110° deflection
KV-X2901:
Hi-Black Trinitron
Approx. 72cm (29 inches)
(Approx. 68cm picture measured diagonally)
110° deflection

**Terminals**
**Rear** 1 21-pin Euro connector
(CENELEC standard)
- inputs for audio and video
- inputs for RGB
- outputs of TV video and audio

2/S2 21-pin Euro connector
- inputs for audio and video
- inputs for S video
- outputs for audio and video (selectable)

**Front** 3 Video input-phono jack
3 Audio input-phono jacks
S3 S video input-4-pin DIN
Headphone jack: stereo mini jack

**Sound output** 2x20W music power

**Power consumption** KV-X2501: 99W
KV-X2901: 108W

**Dimension (WxHxD)** KV-X2501
Approx. 575x500x487mm
KV-X2901
Approx. 656x566x518mm

**Weight** KV-X2501: Approx 33kg
KV-X2901: Approx 45kg

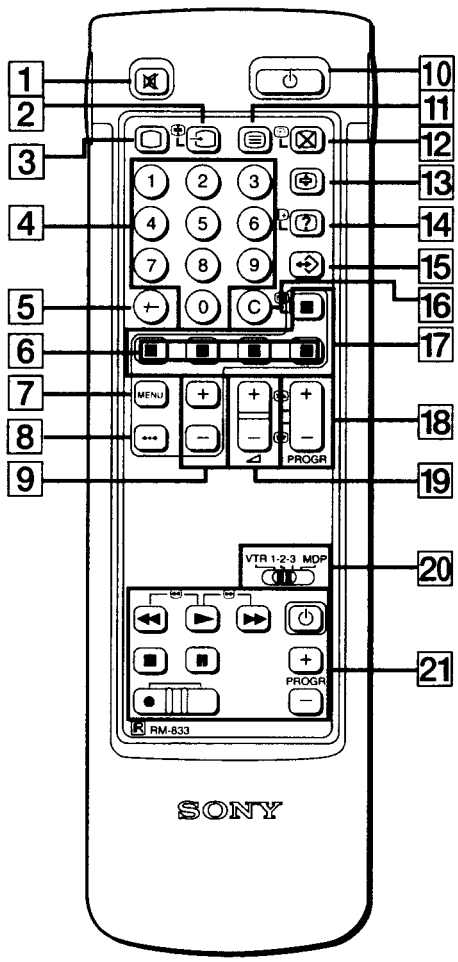
**Supplied accessories** Remote Commander RM-833, Battery R6

**Other features** Fastext/Toptext

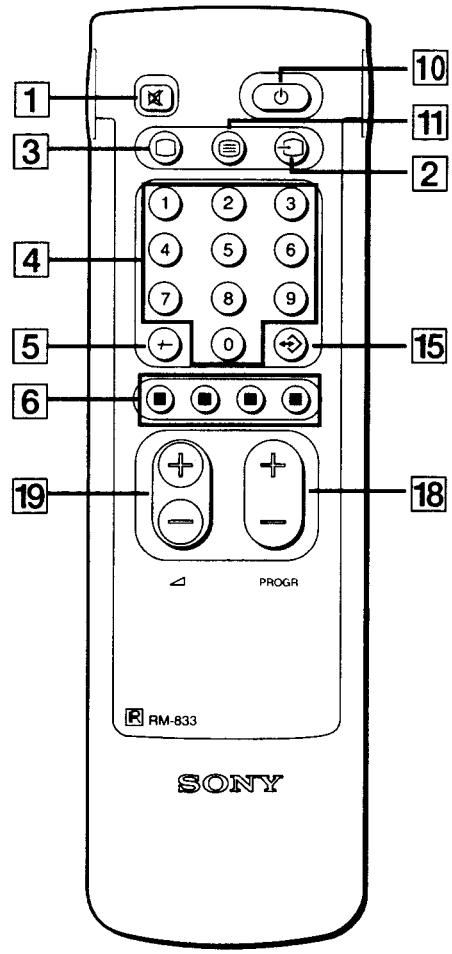
Receivable Channels and Channel Displays

| TV System | Receivable Channels | Channel Displays |
|---|---|---|
| B/G/H | E2, E3 . . . E12 | C02, C03 . . . C12 |
| | E21, E22 . . . E69 | C21, C22 . . . C69 |
| Cable TV(1) | S1, S2 . . . S41 | S01, S02 . . . S41 |
| Cable TV(2) | S01, S02 . . . S05 | S42, S43 . . . S46 |
| | M1, M2 . . . M10 | S01, S02 . . . S10 |
| | U1, U2 . . . U10 | S11, S12 . . . S20 |
| ITALIA | A, B . . . H | C13, C14 . . . C20 |
| | H1, H2 | C11, C12 |
| D/K | R01, R02 . . . R12 | C01, C02 . . . C12 |
| | R21, R22 . . . R69 | C21, C22 . . . C69 |

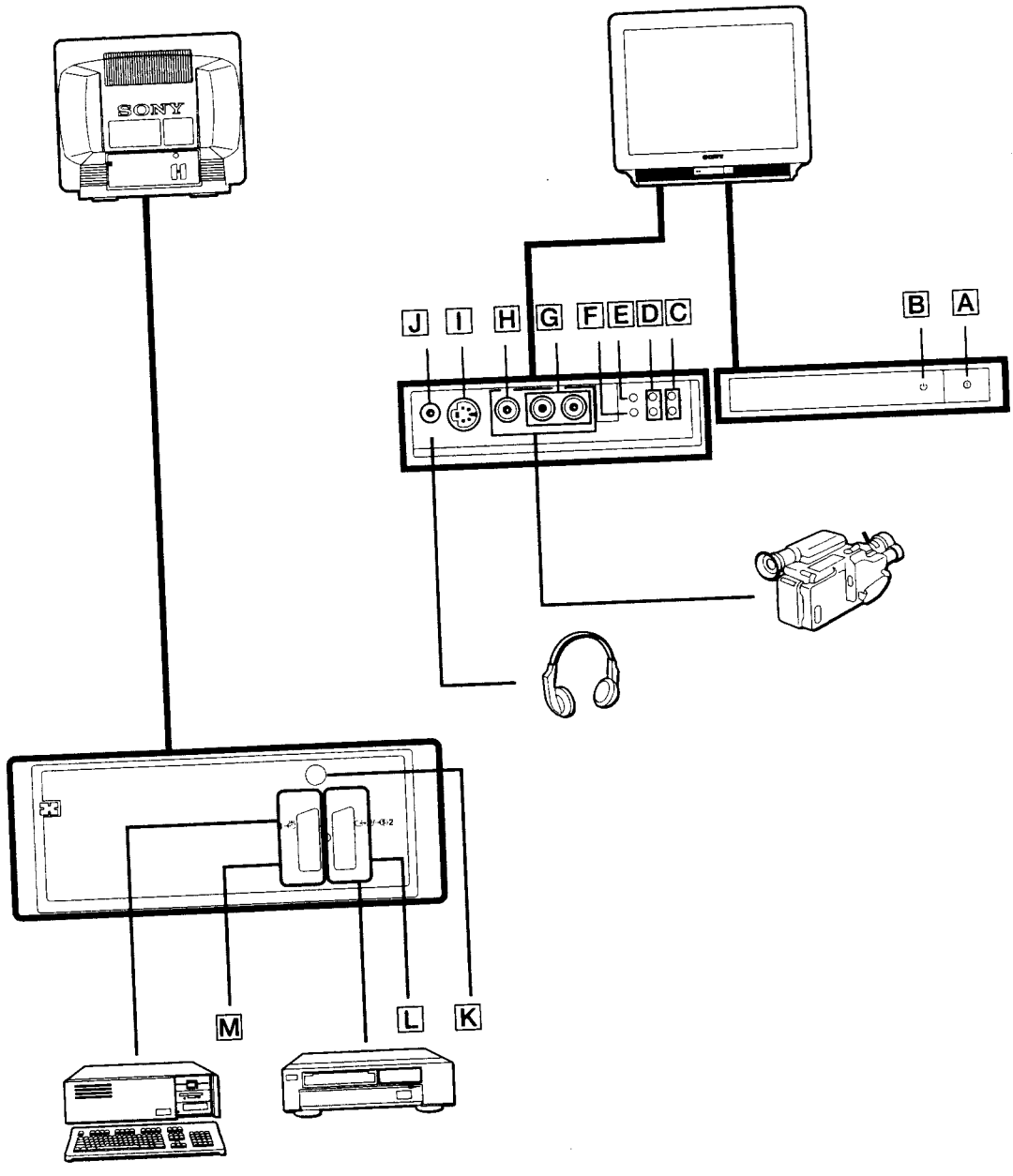
Design and specifications are subject to change without notice.




Full-Function Side




Simple Side


SONY
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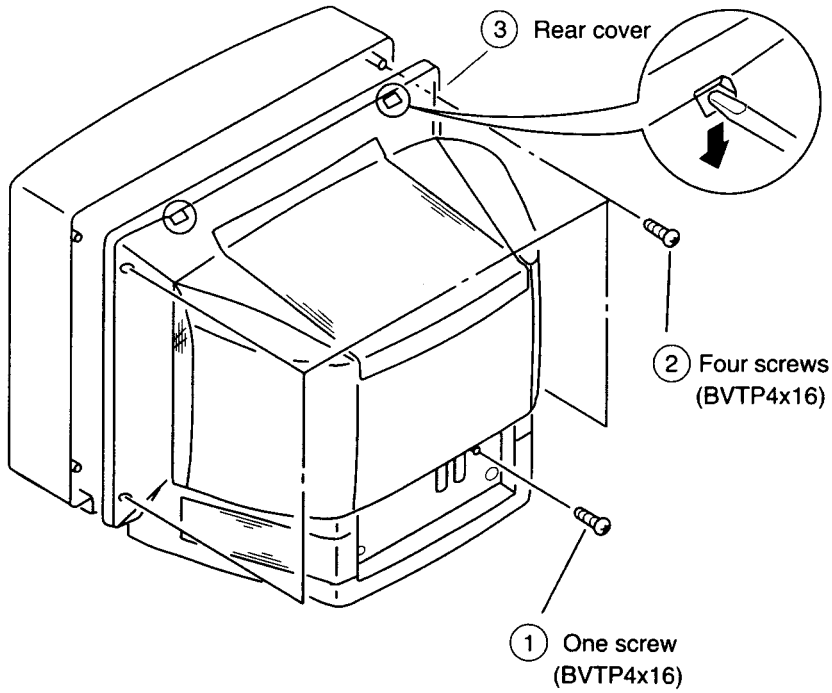
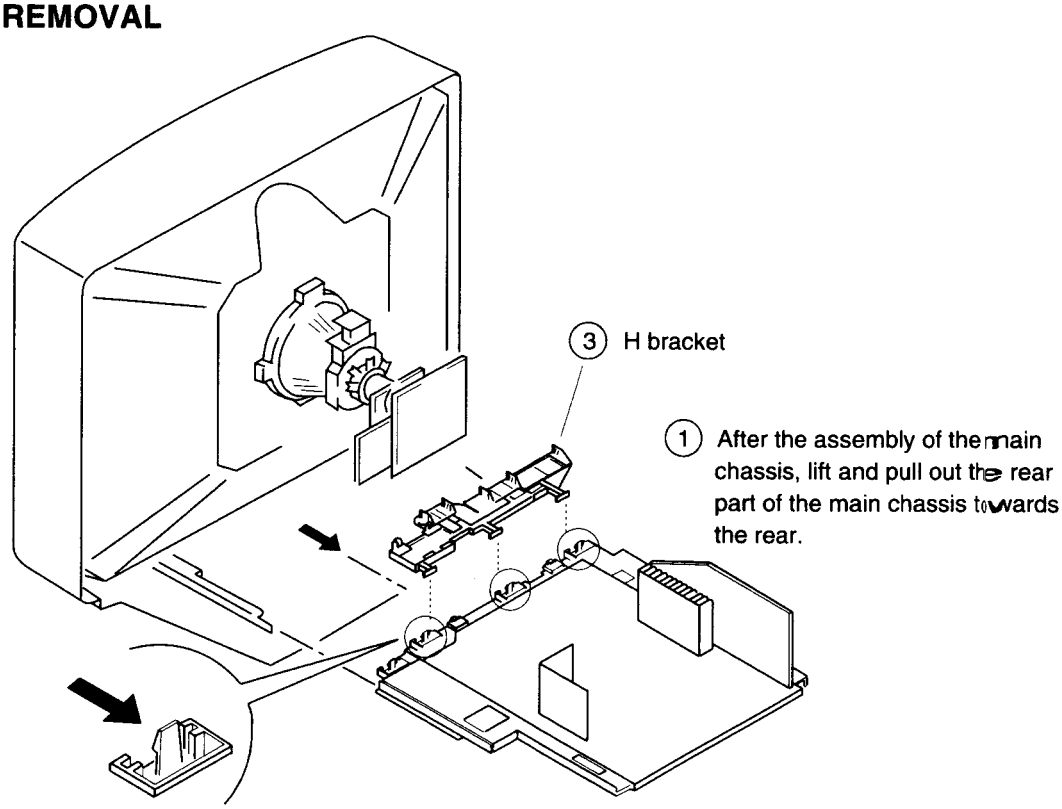
# SECTION 2
# DISASSEMBLY

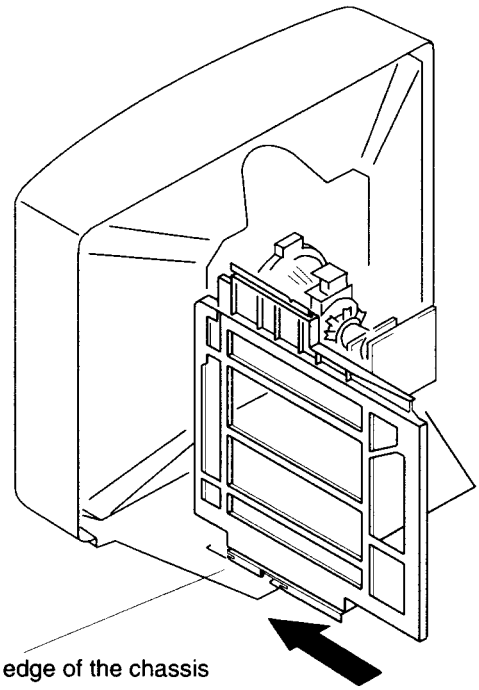
## 2-1. REAR COVER REMOVAL




## 2-2. CHASSIS ASSY REMOVAL

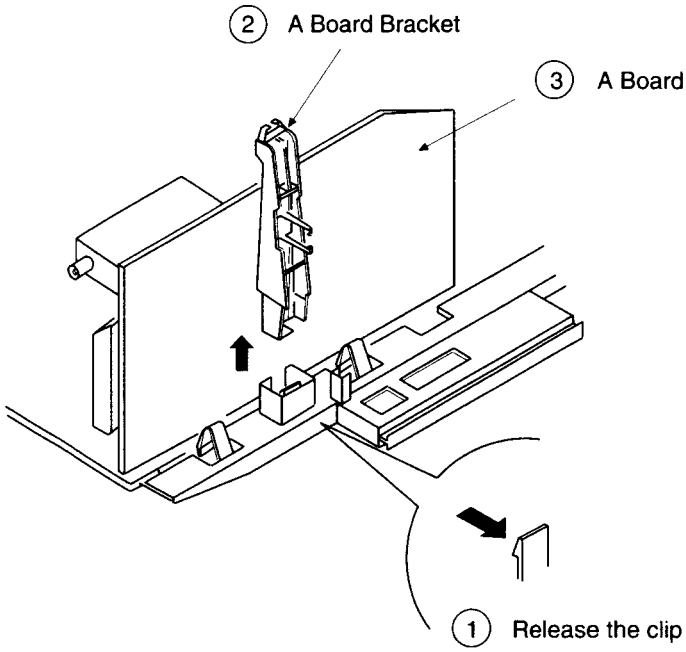

3 H bracket
1 After the assembly of the main chassis, lift and pull out the rear part of the main chassis towards the rear.
2 Push the three claws of the main chassis in the direction of the arrow and remove the H bracket upwards.

## 2-3. SERVICE POSITION

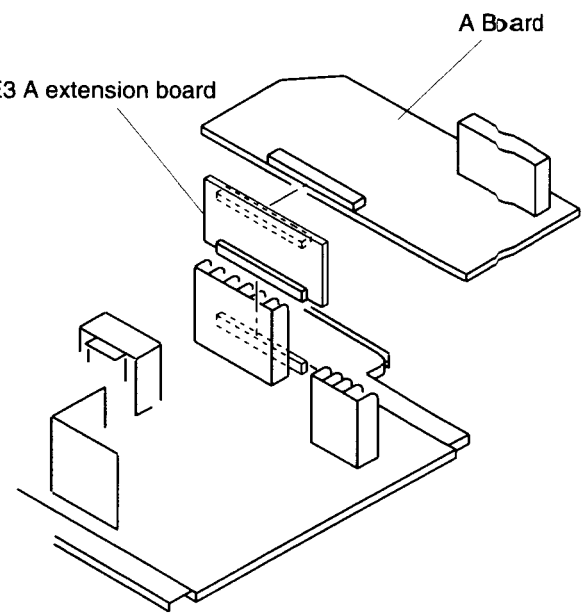


Locate the 2 slots on the edge of the chassis bracket in the locating holes and slide in the direction of the arrow

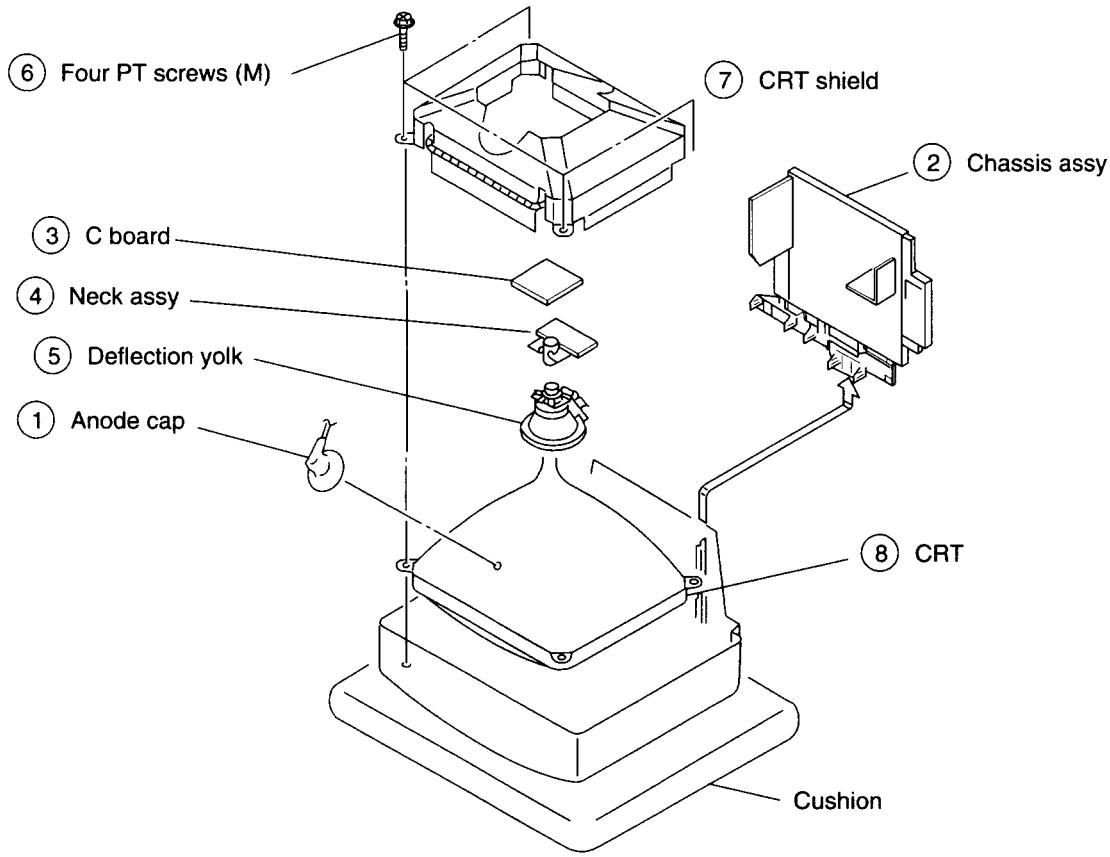
## 2-4. A BOARD REMOVAL


② A Board Bracket
③ A Board
① Release the clip by pressing in the direction of the arrow, shown and lift out the A board bracket

## 2-5. EXTENSION BOARD



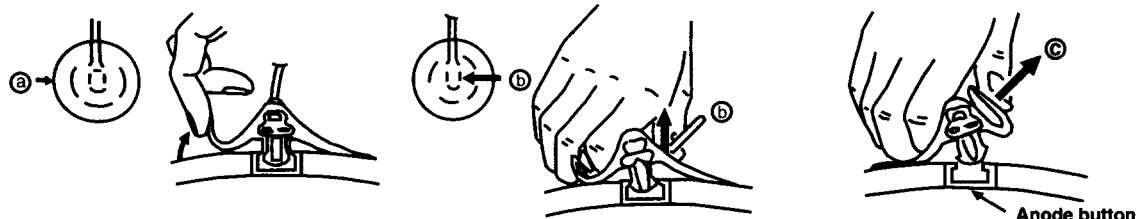
## 2-6. PICTURE TUBE REMOVAL




### • REMOVAL OF ANODE-CAP

**Note:** Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

*** REMOVING PROCEDURES.**




① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ

② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ

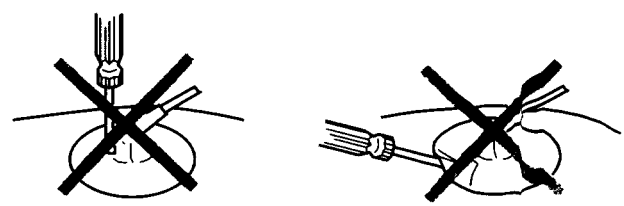
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ

**• HOW TO HANDLE AN ANODE-CAP**

① Don't damage the surface of anode-cap with sharp shaped material !

② Don't press the rubber hardly not to hurt inside of anode-caps !
A metal fitting called as shatter-hook terminal is built into the rubber.

③ Don't turn the foot of rubber over hardly !
The shatter-hook terminal will stick out or damage the rubber.



# SECTION 3
# SET - UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to these settings :

◑ Contrast ..... 80% (or remote control normal)
☼ Brightness ..... 50%

- Carry out the following adjustments in this order :

1. Beam landing
2. Convergence
3. Focus
4. White balance

**Note:** Testing equipment required.
1. Color bar/pattern generator
2. Degausser
3. DC power supply
4. Digital multimeter
5. Oscilloscope

---

**Preparation:**
- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

## 3-1. BEAM LANDING

1. Input the white signal with the pattern generator.
   CONTRAST } normal
   BRIGHTNESS }
2. Position neck assy as shown in Fig.3-2.
3. Set the pattern generator raster signal to red.
4. Move the deflection yoke forward and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side. (See Fig. 3-1 - 3-3)
5. Move the deflection yoke forward and adjust so that the entire screen becomes red. (See Fig. 3-1)
6. Switch the raster signal to blue, then to green and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Fig. 3-4)

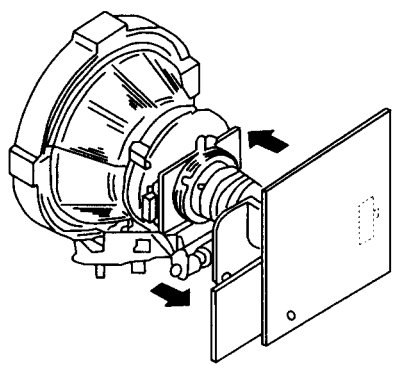
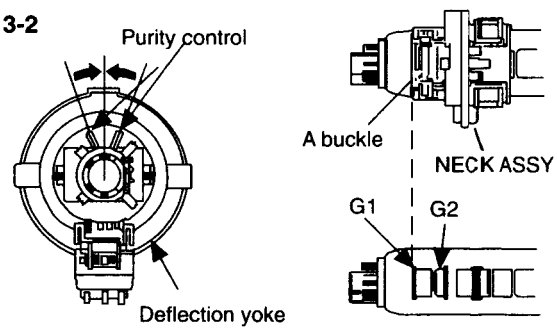


Fig. 3-1

Fig. 3-2



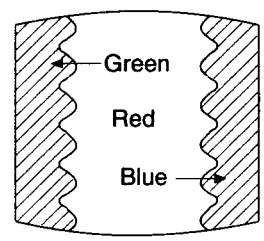




Fig. 3-3

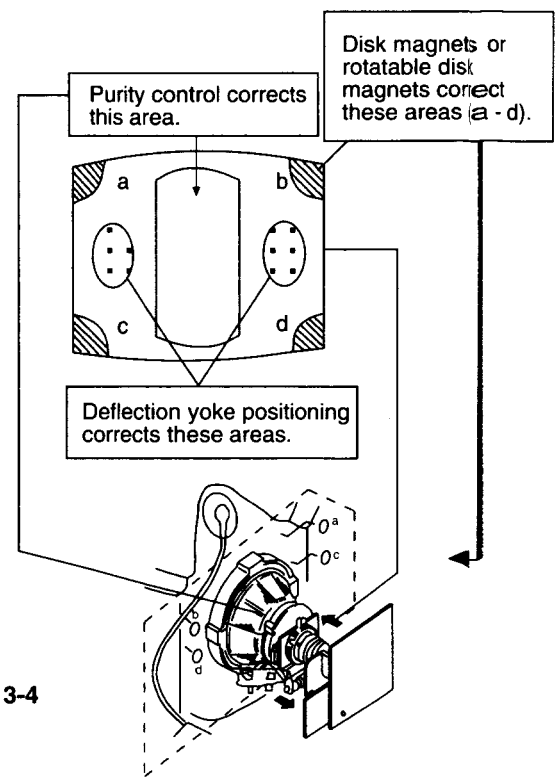


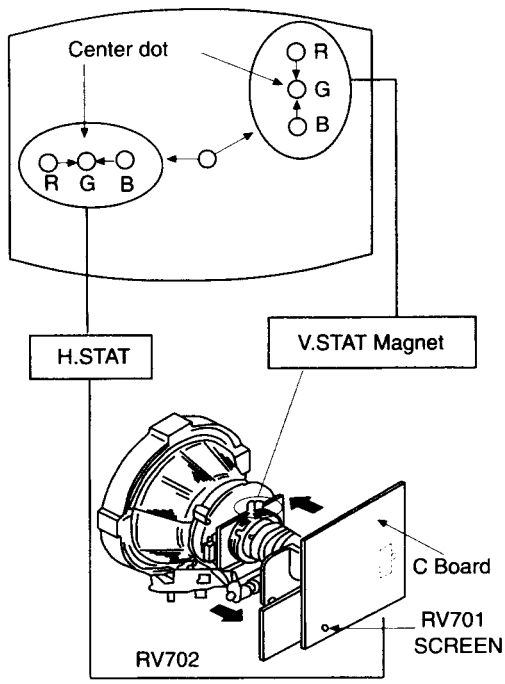

Fig. 3-4

## 3-2. CONVERGENCE

**Preparation:**

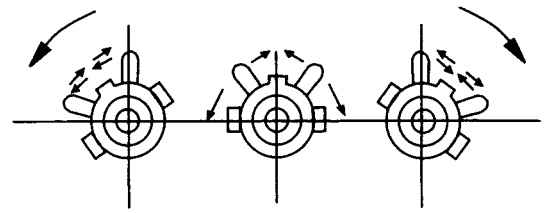
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide a dot pattern.

### (1) Horizontal and vertical static convergence

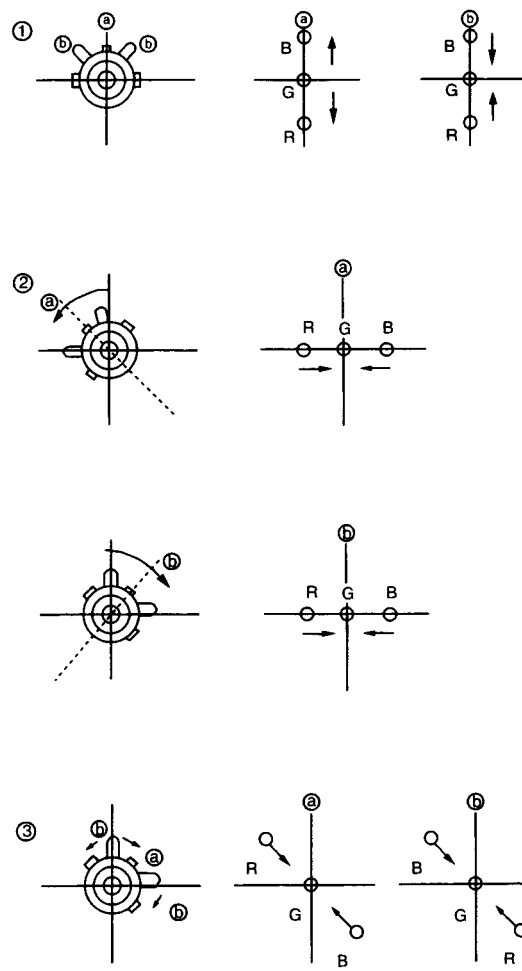



1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

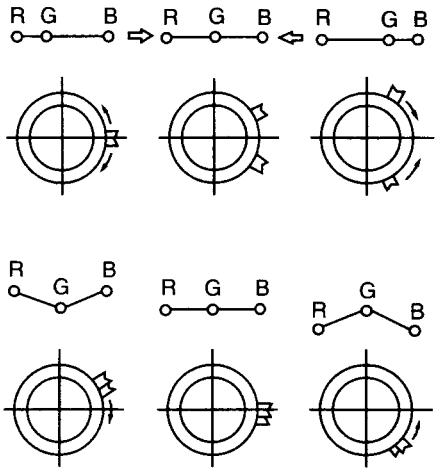
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.

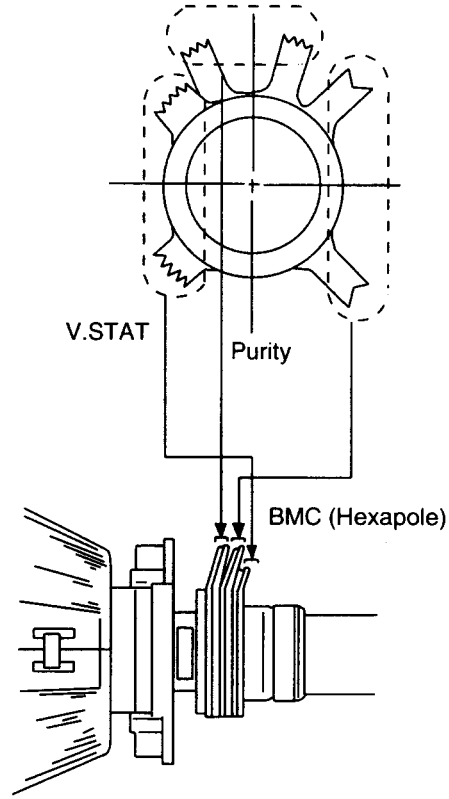


4. If the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the red, green, and blue points move as shown below.



- Operation of BMC (Hexapole) Magnet



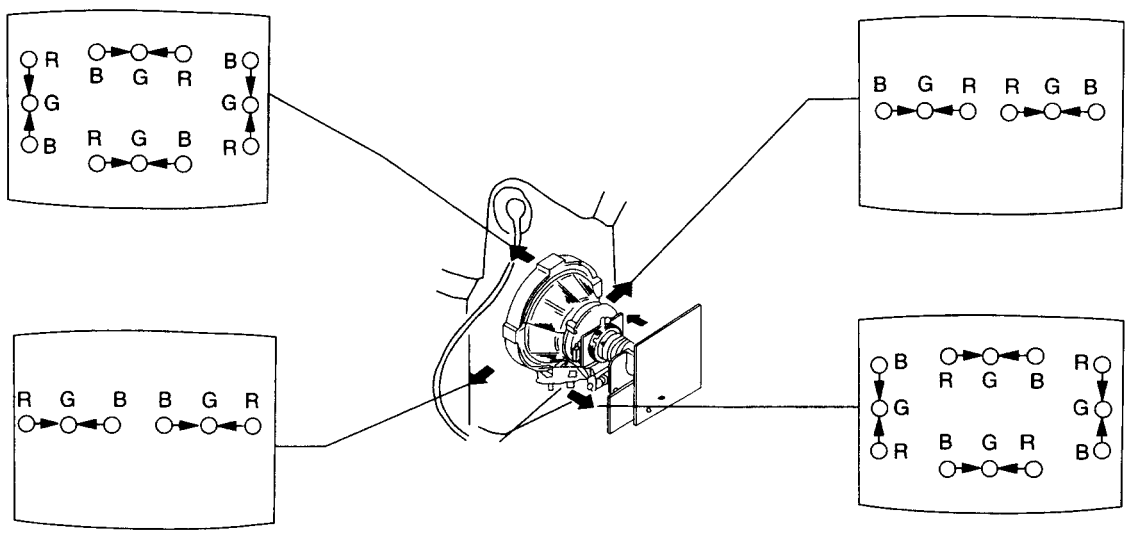

- The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment while tracking.
  Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of the screen (by moving the dots in the horizontal direction).

### (2) Dynamic convergence adjustment.

**Preparation:**

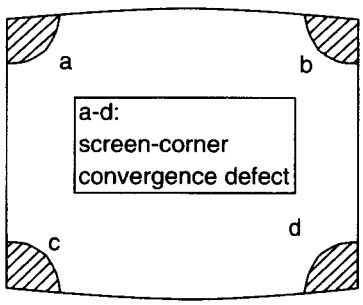
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.

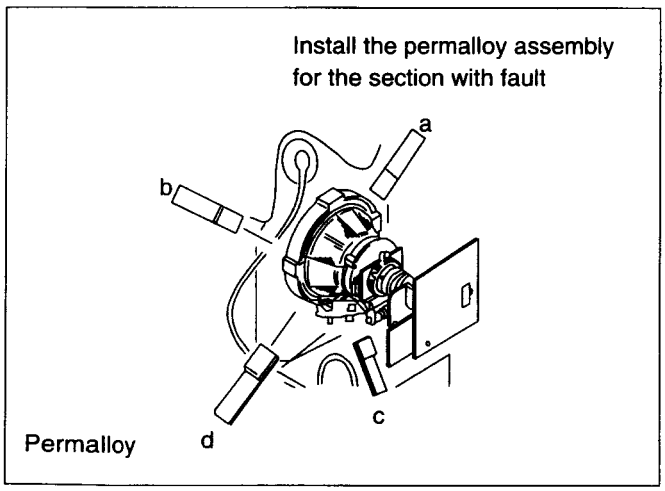
1. Slightly loosen the deflection yoke screws.
2. Remove the deflection yoke spacer.
3. Move the deflection yoke as shown in the figure below and optimize the convergence.
4. Tighten the deflection yoke screws.
5. Re-install the deflection yoke spacer.



### (4) Screen corner convergence.

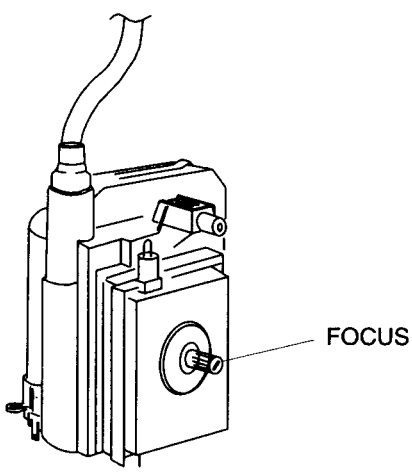
If you are unable to adjust the corner convergence properly, correct them with the use of permalloy assemblies.




## 3-3. Focus

Adjust the focus to optimize the screen.



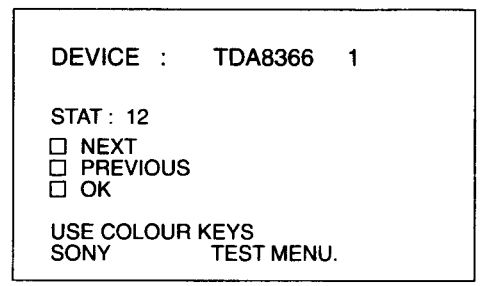

## 3-4. WHITE BALANCE

**Screen G2 Setting**

1. Input the dot signal from the pattern generator.
2. Set the picture brightness control to its lowest level.
3. Apply 180V DC to the R,G, and B cathodes with an external power supply.
4. While watching the picture, adjust G2 control RV701 (Screen) to the point just before the return lines disappear.

**White balance adjustment**

1. Receive an all-white signal.
2. Enter into service mode. (Refer to the section 4 "Electrical Adjustment" on how to enter service mode.)
3. Select TDA8366 1 on menu.




4. Press the White button on the Remote Commander to enter into the device Menu.
5. Press the Red button 10 times "Next" "Next" "Next" to select HWB RED, adjust to 040.
6. Press the Red button to select HWB GREEN, adjust with the + and - menu buttons so that the white balance becomes optimum.
7. Press the Red button to select HWB BLUE, adjust with the + and - menu buttons so that the white balance becomes optimum.
8. Press the TV button twice on the Remote Commander to store the data and return to TV operation.

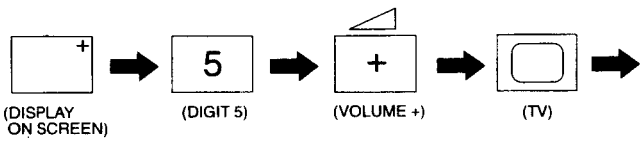
# SECTION 4
# CIRCUIT ADJUSTMENTS

## 4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander RM-833.

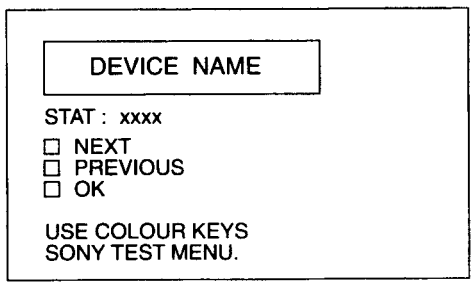
**HOW TO ENTER INTO SERVICE MODE**

1. Turn on the main power switch of the set and enter into standby mode.
2. Press the following sequence of buttons on the Remote Commander.

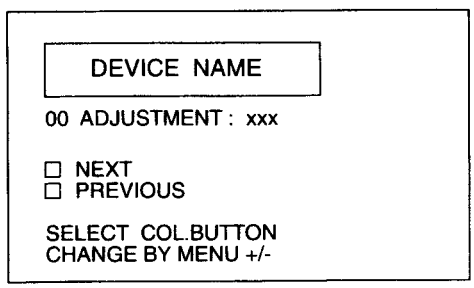



"TT " will appear in the top right corner of the screen. Other status information will also be displayed.

3. Press the MENU button on the Remote Commander to obtain the menu on the screen.




4. Press the Red (Next) and Green (Previous) buttons to select the device corresponding to the adjustment item from the table. Then press the White button (OK).




5. Press the Red (Next) or Green (previous) buttons to select the adjustment item. Then press the and buttons to change the data to comply with each standard.

6. Turn off the power to quit the service mode when adjustments are completed.

Initial Conditions for setup of TDA8366, TDA6612 and SAA7283. ( Stereo Models Only )

| TDA8366 1 | INIT VALUE | TDA8366 2 | INIT VALUE |
|---|---|---|---|
| Hue | 31 | Interlace | 00 |
| H Shift | Adj | Sync Mode | 00 |
| H Size | Adj | Col Dec | 00 |
| Pin Amp | Adj | Vert Div | 00 |
| Corn Pin | Adj | Vid ID | 00 |
| Tilt | Adj | EHT Track | 01 |
| V.Linear | Adj | En V Grd | 00 |
| V.Size | Adj | Serv Blk | 00 |
| S.Corr | Adj | OVP Mode | 00 |
| V.Cent | Adj | Aspect R | 00 |
| HWB Red | Adj | Start Freq | 00 |
| HWB Green | Adj | Y/C Input | 00 |
| HWB Blue | Adj | PAL/NTSC | 00 |
| Peaking | 8 | Xtal PLL | 00 |
| Bright | 32 | Y Delay | 07 |
| Colour | 32 | RGB Blk | 00 |
| Picture | 37 | Noise Cor | 00 |
| AGC Set | 00 | Fast Blk | 01 |
| Srce Sel 1 | 00 | AFC Wind | 00 |
| Srce Sel 2 | 00 | IF Sensty | 00 |
| Time Con | 03 | Mod Std | 00 |
| Xtal Ind | 03 | Vid Mute | 01 |
| FF Freq | 02 | | |

| TDA6612 | INIT VALUE | TDA6612 | INIT VALUE |
|---|---|---|---|
| MPX Per | 00 | Mute 2 | 01 |
| Quasi St | 00 | C1/2LS | 00 |
| Bass Exp | 00 | C1/2KH | 00 |
| H Pulse | 00 | Mono | 01 |
| Matrix St | 00 | Scart | 00 |
| Bypass | 00 | Scart D | 00 |
| Vol L Sp | 07 | AM | 00 |
| Vol R Sp | 07 | SAA7283 | INIT VALUE |
| Vol HP | 00 | Mon M1/M2 | 01 |
| Pll Sync | 00 | DM Select | 01 |
| Mute 3 | 01 | SSWIT 123 | 07 |
| Treble | 08 | Port 2 | 00 |
| Bass | 09 | Mute Def | 00 |
| X Talk Adj | Adj | AMDIS | 00 |
| Mute 1 | 00 | E Max | 80 |
| | | E Min | 01 |

## 4-2. TEST MODE 2 :

Is available by pressing Test button twice, OSD 'TT ' appears. The functions described below are available by pressing the two numbers. To release the Test Mode 2, press 0 twice, or switch the TV into Stand-by Mode.

| | |
|---|---|
| 00 | switch Test Mode 2 off |
| 01 | picture maximum |
| 02 | picture minimum |
| 03 | Volume 35% |
| 04 | Volume 50% |
| 05 | Volume 65% |
| 06 | Volume 80% |
| 07 | Ageing Condition (Volume min., Picture max., Brightness max. |
| 08 | Shipping Condition (Analog Values are RESET due to factory setting, Prog 1 is selected, TT Mode is switched off) |
| 09 | "Menu" Flag request |
| 10 | Tenth entry is deleted |
| 11 | dummy |
| 12 | dummy |
| 13 | dummy |
| 14 | Forced AV 16:9 detection on/off |
| 15 | Read factory setting from NVM<br>Reads Volume, Balance, Treble, Bass, Brightness, Contrast, Hue, Sharpness, Colour values from ROM to the actual used values (Last Power Memory) |
| 16 | Save actual used values as RESET values<br>Memorize actual used values Balance, Treble, Bass, Hue, Sharpness at RESET position in NVM. |
| 17 | Preset Label for AV Sources |
| 18 | RGB Priority on/off |
| 19 | Clear all preset labels |
| 20 | Tenth entry is deleted |
| 21 | Sub Contrast |
| 22 | Sub Colour |
| 23 | Sub Brightness |
| 24 | Set destination = U RGB Priority = Off |
| 25 | Set destination = D RGB Priority = Off |
| 26 | Set destination = B RGB Priority = On |
| 27 | Set destination = K RGB Priority = Off |
| 28 | Set destination = L RGB Priority = Off |
| 29 | Set destination = E RGB Priority = Off |

| | |
|---|---|
| 30 | Tenth entry is deleted |
| 31 | Set Destination = A RGB Priority = On |
| 32 | dummy |
| 33 | Auto AGC |
| 34 | N/S Pin Adjust |
| 35 | Manual AGC Adjust |
| 36 | dummy |
| 37 | dummy |
| 38 | dummy |
| 39 | dummy |
| 40 | Tenth entry is deleted |
| 41 | Re-initialise NVM |
| 42 | Production use only |
| 43 | Initialise Geom Settings |
| 44 | Initialise all favorite pages = 100 |
| 45 | Channel locks = off |
| 46 | IR Channel Pressetting Mode<br>The channel pressetting can be done by a Special IR Transmitter ( Ver 2 and above software only) |
| 47 | dummy |
| 48 | Set NVM testbyte to 44h |
| 49 | Erase the NVM Testbyte (this byte detects already stored NVM's) After selecting this function, switch TV Off and On -> the NVM will be preset by µ-Controller. |

In Test Mode the Menu display is switchable by the Speaker-Off button.

**Note** : For Test Modes 41 - 49 it is necessary to ensure that the TV is set to Prog 59.

## SUB BRIGHTNESS ADJUSTMENT

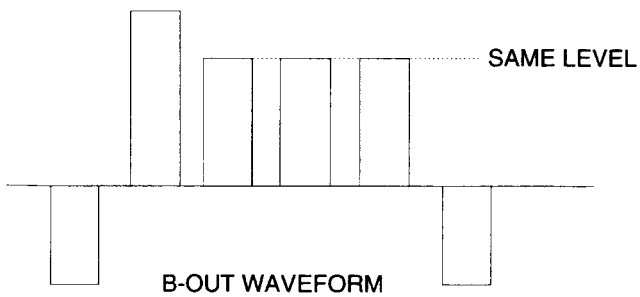
1. Input a Phillips pattern.
2. Enter into service mode and press 23.
3. Adjust data so that 0-IRE of grey scale and CUT-OFF 20-IRE are only slightly visible on screen.

## SUB CONTRAST ADJUSTMENT

1. Input a video that contains a small 100% area on a Black Background.
2. Enter into service mode and press 01 to have PIC max followed by 21.
3. Connect oscilloscope to pin (1) of CN703 (R OUT) and adjust HWB Red data of TDA8366 1 to obtain 2.3Vp-p.

## SUB COLOR ADJUSTMENT

1. Input a PAL color bar signal.
2. Connect an oscilloscope to pin (3) of CN703 (B OUT) on the C board.
3. Enter into service mode and press 22.
4. Adjust data so that the right sides of the waveform are set to the same level.




## STEREO SEPARATION ADJUSTMENT

1. Input a 1KHz stereo signal to the L-ch and a 400Hz stereo signal to the R-ch.
2. Enter into service mode and select the "Test Menu" to be TDA6612.
3. Select the Stereo Xtalk Adjustment Menu, by using the Red (Next) and Green (Previous) buttons.
4. Monitor the Scart 1 L-channel output and adjust the data so that the R-channel sound is not detected in the L-channel.

## I.F. COIL ADJUSTMENT (T101) - B/G, D/K, I AND L STANDARD FOR CONTINENTAL MODELS.

1. Apply a 38.9MHz signal at 100dBuV to the input of SWF101.
2. Receive a channel so that the I.C. is selected for negative modulation.
3. Measure the voltage at the AFT test point and adjust (T101) to obtain 2.4V +/- 0.2V.

## I.F. COIL ADJUSTMENT (T101) - I, STANDARD FOR U.K. MODELS.

1. Apply a 39.5MHz signal at 100dBuV to the input of SWF101.
2. Receive a channel so that the I.C. is selected for negative modulation.
3. Measure the voltage at the AFT test point and adjust (T101) to obtain 2.4V +/- 0.2V.

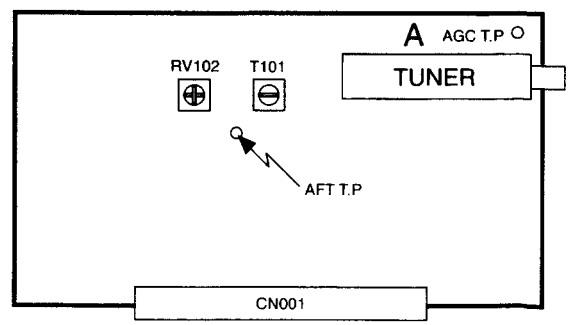
## L, BAND 1 ADJUSTMENT (RV102) - L, STANDARD FOR FRENCH MODELS.

1. Apply a 33.95MHz signal at 100dBuV to the input of SWF101.
2. Receive a channel so that the I.C. is selected for positive modulation and system L band 1.
3. Measure the voltage at the AFT test point and adjust (RV102) to obtain 2.4V +/- 0.2V.

**Note** : Only adjust RV102 after T101 has been correctly adjusted.

## AGC ADJUSTMENT

1. Receive an off- air signal.
2. Enter the service mode, ("Test" "Test") and 35.
3. Adjust the data so that there is no snow or cross - modulation visible on the screen.
4. Change the receiving off-air channel, and confirm the above status.



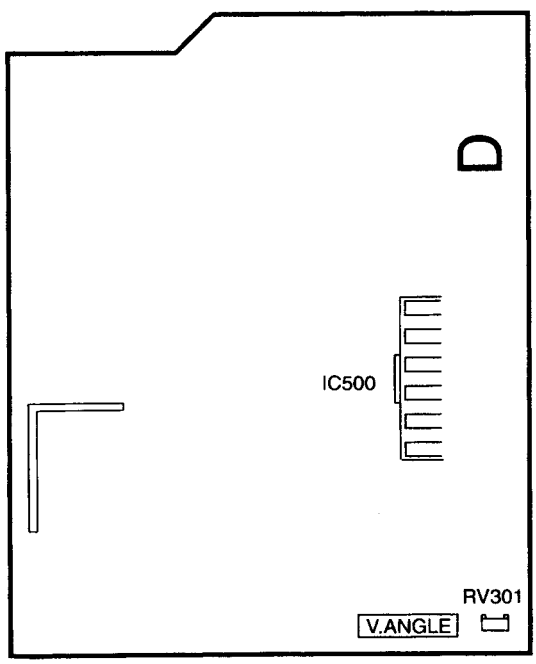

- A Board component side -

## DEFLECTION SYSTEM ADJUSTMENT

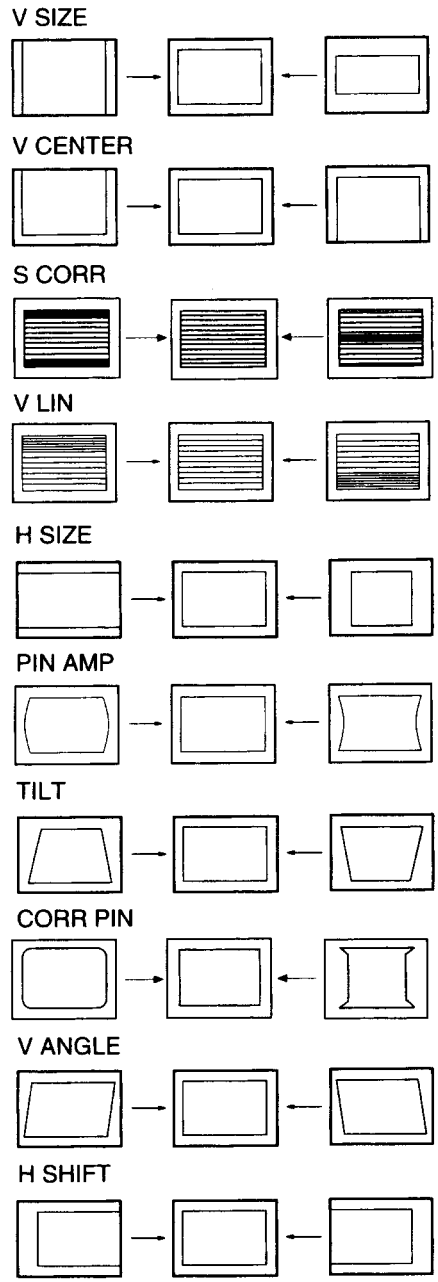
1. Enter into service mode.
2. Select and adjust each item in order to obtain the optimum image.

| Item No | Adjustment item. | Data Amount |
|---|---|---|
| 03 | H SHIFT | ADJ. |
| 04 | H SIZE | ADJ. |
| 05 | PIN AMP | ADJ. |
| 06 | CORR PIN | ADJ. |
| 07 | TILT | ADJ. |
| 08 | V LINEAR | ADJ. |
| 09 | V SIZE | ADJ. |
| 0A | S CORR | ADJ. |
| 0B | V CENTER | ADJ. |

Note : V ANGLE is adjusted by a Variable Resistor on the 'D' Board (RV301)




- D Board Component Side -



## 4-3. BE3 SELF DIAGNOSTIC SOFTWARE

The identification of errors within the BE-3 chassis is triggered in 1 of 2 ways :- 1: Bus busy or 2: Device failiure to respond to IIC. In the event of one of these situations arrising the software will first try to release the bus if busy (Failiure to do so will report with continous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the led (Series of flashes which must be counted) See Table 1., on fatal errors are reported with this method.

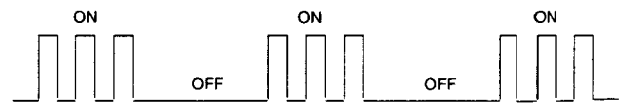
If a fatal error is found the set will simply stay in whichever state it was when the error occured, but if a non fatal error occurs the set will try to continue operation.

**Table 1**

| Device | LED Error Count | Fatal Error |
|---|---|---|
| NVM | 2 .. 9 | √ |
| Teletext | 10 | |
| Jungle | 11 | √ |
| Video_sw | 12 | |
| Tuner | 13 | √ |
| Nicam | 14 | |
| Audio_cont | 15 | √ |

Flash Timing Example : e.g. error number 3.

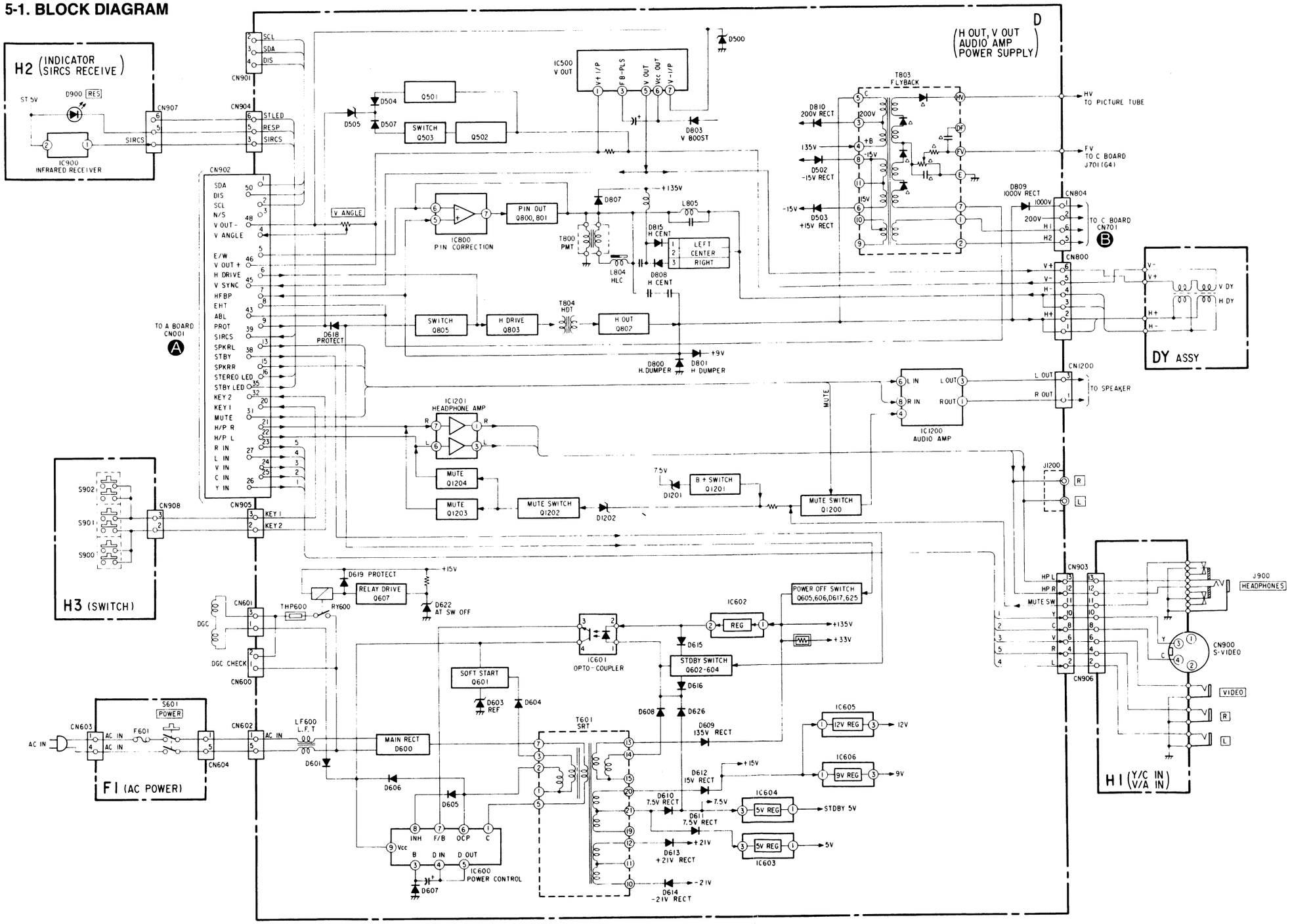
Stby LED

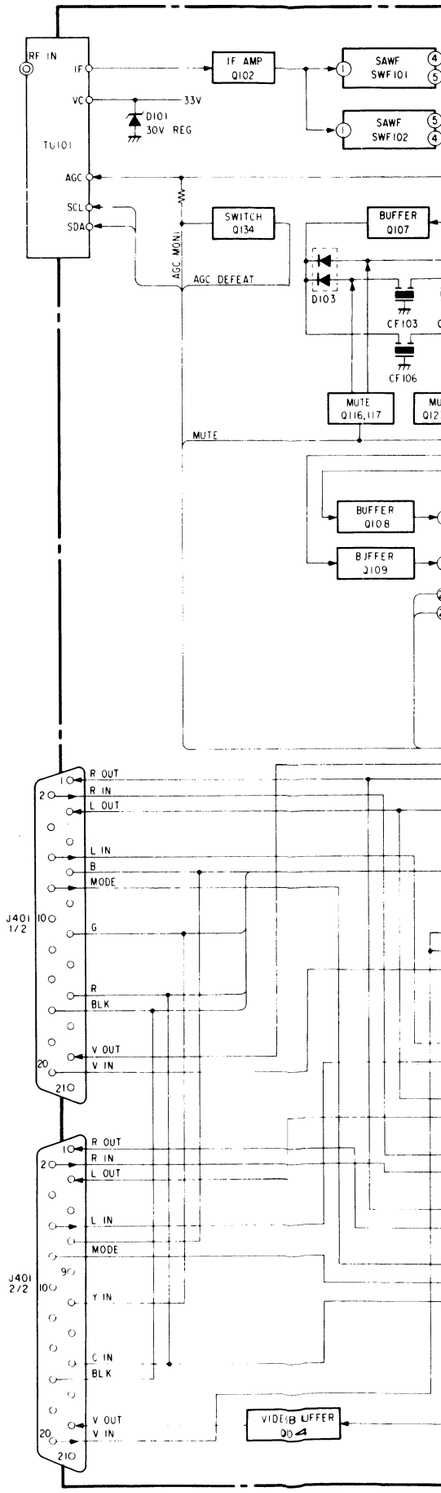


**MEMO**

# SECTION 5
# DIAGRAMS

## 5-1. BLOCK DIAGRAM



D
(H OUT, V OUT
AUDIO AMP
POWER SUPPLY)

T803
FLYBACK

HV
TO PICTURE TUBE

FV
TO C BOARD
J701 (G4)

D809
1000V RECT

CN804

TO C BOARD
CN701
B

CN800

V DY
H DY

DY ASSY

CN1200

TO SPEAKER

IC1200
AUDIO AMP

J1200
R
L

CN903

J900
HEADPHONES

CN900
S-VIDEO

CN906

VIDEO
R
L

12V
9V

HI (Y/C IN
V/A IN)

A
(VIF/SIF, SYNC SE
JUNGLE, AUDIO SE
A/V SELECT

IC101
VIF/SIF

RF IN
IF AMP
Q102
SAWF
SWF101
SAWF
SWF102
TU101
33V
D101
30V REG
AGC
SCL
SDA
SWITCH
Q134
AGC MONI
AGC DEFEAT
BUFFER
Q107
D103
CF103
CF104
CF106
MUTE
Q116,117
MUTE
Q123,124
VIF I/P
VIF I/P
SIF
SIF
TAGC
CAGC
QSS
FMI
FM2
AF2 OUT
AF1 OUT
V OUT
VIDEO AMP
Q132,131
VCO2
VCO1
VI
VO
T101
77.8MHz
CF102
AFT
TOP
STD SW
AFT
AGC ADJ
SYS

BUFFER
Q130
BUFFER
Q133

IC202
SYNC SEP
SYNC SEP
PHASE
COMP
H OSC
SYNC AMP
Q120
OSC BUFFER
Q114

IC201
AUDIO SELECT
BUFFER
Q108
BUFFER
Q109
L IN
R IN
SDA
SCL
PILOT
MONO
OSC
HP L
HP R
SP L
SP R
L IN
R IN
L OUT
R OUT
MUTE
SDA/SCL

IC1002
VIDEO PROCESSER
VIDEO
SCL
SDA
SYNC
BLACK
GREEN
BLUE
RED
RS TB
CLK IN
TDATA
TCLK
TCSB
WINDOW
VIDEO
OSC OUT
IDATA
TCLK
SYNC
WIN
OSC I
IC1001
X1001
13.875MHz
SYNC BUFFER
Q1001

IC1003
RGB SW

IC302

IC303

IC301
JUNGLE
INT CVBS IN
SECAM REF
SCP OUT
VID. OUT
R-Y OUT
B-Y OUT
B-Y IN
R-Y IN
HFLB IN
EXT CUBS IN
CUBS OUT
SUHS-Y
SUHS-C
R
G
B
FB
BI CURR IN
D303
D304
D305
D311
D380
BCL IN
H OUT
-2 FILTER
EW OUT
V+ OUT
V- OUT
EHT IN
3.58MHz
4.43MHz
X1101
Y IN
Y OUT
AMP
Q314
AGC OUT
SCL
SDA
VM AMP
Q381
VM OUT
Q313, 312
MUTE
Q380
(HFBP)

J401
1/2
J401
2/2
R OUT
R IN
L OUT
L IN
B
MODE
G
R
BLK
V OUT
V IN
C IN
BLK

IC401
A/V SELECT
V2
Y2
V3
V OUT 2
LV3
LV2
L TV
L OUT 2
RV3
RV2
R TV
R OUT 2
S3
S2
C2
R OUT I
L OUT I
SCL
SDA
TV
Y OUT
C OUT
V OUT I
EXT SYNC
TEXT OUT
VI
LVI
YI
RVI
CI

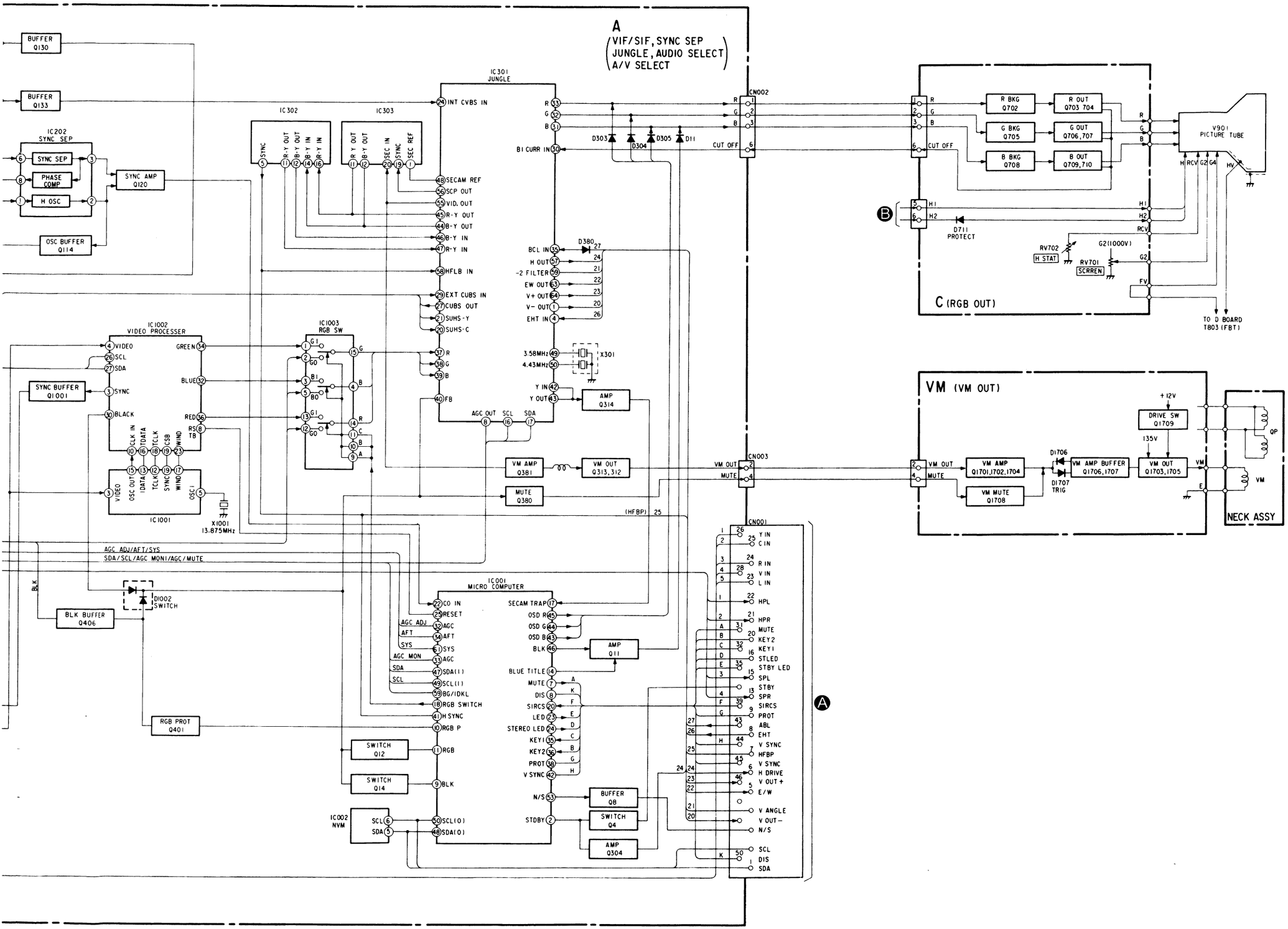
V BUFFER
Q403
BUFFER
Q402
VIDEO BUFFER
Q404

AGC ADJ/AFT/SYS
SDA/SCL/AGC MONI/AGC/MUTE
BLK
BLK BUFFER
Q406
D1002
SWITCH
RGB PROT
Q401

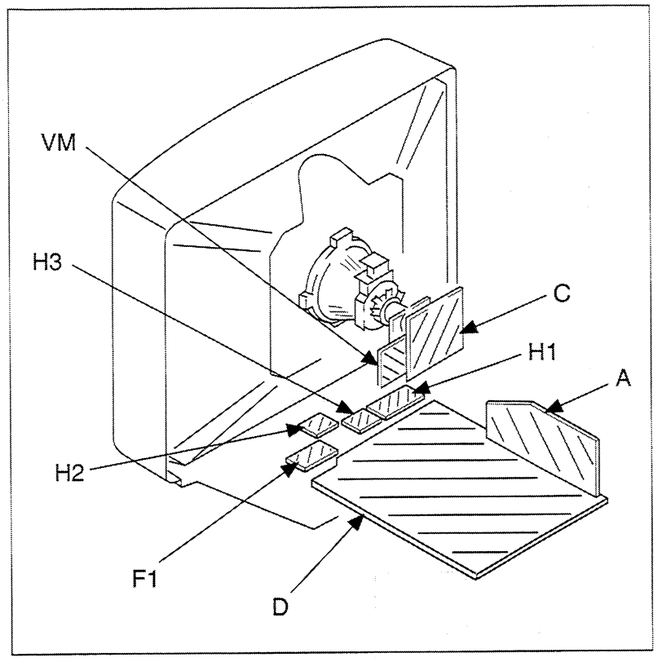
IC001
MICRO COMPUTER
CO IN
RESET
AGC
AFT
SYS
AGC
SDA(1)
SCL(1)
BG/IDKL
RGB SWITCH
H SYNC
RGB P
RGB
BLK
SCL(0)
SDA(0)
SECAM TRAP
OSD R
OSD G
OSD B
BLK
BLUE TITLE
MUTE
DIS
SIRCS
LED
STEREO LED
KEY1
KEY2
PROT
V SYNC
N/S
STDBY
AMP
Q11
BUFFER
Q8
SWITCH
Q4
LAMP
Q304
AGC ADJ
AFT
SYS
AGC MON
SDA
SCL

IC002
NVM
SCL
SDA

SWITCH
Q12
SWITCH
Q14


A
(VIF/SIF, SYNC SEP
JUNGLE, AUDIO SELECT
A/V SELECT)
BUFFER Q130
BUFFER Q133
IC202 SYNC SEP
SYNC SEP
PHASE COMP
H OSC
SYNC AMP Q120
OSC BUFFER Q114
IC301 JUNGLE
IC302
IC303
INT CVBS IN
SECAM REF
SCP OUT
VID. OUT
R-Y OUT
B-Y OUT
B-Y IN
R-Y IN
HFLB IN
EXT CUBS IN
CUBS OUT
SUHS-Y
SUHS-C
BCL IN
H OUT
-2 FILTER
EW OUT
V+ OUT
V- OUT
EHT IN
3.58MHz
4.43MHz
X301
Y IN
Y OUT
AMP Q314
AGC OUT
SCL
SDA
D303
D304
D305
D11
D380
BI CURR IN
CUT OFF
CN002
IC1002 VIDEO PROCESSER
IC1003 RGB SW
SYNC BUFFER Q1001
VM AMP Q381
VM OUT Q313,312
MUTE Q380
CN003
IC1001
X1001 13.875MHz
(HFBP)
CN001
AGC ADJ/AFT/SYS
SDA/SCL/AGC MONI/AGC/MUTE
BLK
D1002 SWITCH
BLK BUFFER Q406
IC001 MICRO COMPUTER
RGB PROT Q401
SWITCH Q12
SWITCH Q14
IC002 NVM
SECAM TRAP
OSD R
OSD G
OSD B
BLK
AMP Q11
BLUE TITLE
MUTE
DIS
SIRCS
LED
STEREO LED
KEY1
KEY2
PROT
V SYNC
N/S
STDBY
BUFFER Q8
SWITCH Q4
AMP Q304
Y IN
C IN
R IN
V IN
L IN
HPL
HPR
MUTE
KEY2
KEY1
STLED
STBY LED
SPL
STBY
SPR
SIRCS
PROT
ABL
EHT
V SYNC
HFBP
V SYNC
H DRIVE
V OUT +
E/W
V ANGLE
V OUT –
N/S
SCL
DIS
SDA
C (RGB OUT)
R BKG Q702
G BKG Q705
B BKG Q708
R OUT Q703 704
G OUT Q706,707
B OUT Q709,710
V901 PICTURE TUBE
H1
H2
D711 PROTECT
RV702 H STAT
RV701 SCRREN
G2(1000V)
TO D BOARD T803 (FBT)
VM (VM OUT)
+12V
DRIVE SW Q1709
135V
VM AMP Q1701,1702,1704
VM MUTE Q1708
D1706
D1707 TRIG
VM AMP BUFFER Q1706,1707
VM OUT Q1703,1705
QP
VM
NECK ASSY

## 5-2. CIRCUIT BOARDS LOCATION




Reference information

| | | |
|---|---|---|
| RESISTOR | RN | : METAL FILM |
| | RC | : SOLID |
| | FPRD | : NONFLAMMABLE CARBON |
| | FUSE | : NONFLAMMABLE FUSIBLE |
| | RS | : NONFLAMMABLE METAL OXIDE |
| | RB | : NONFLAMMABLE CEMENT |
| | RW | : NONFLAMMABLE WIREWOUND |
| | ※ | : ADJUSTMENT RESISTOR |
| COIL | LF-8L | : MICRO INDUCTOR |
| CAPACITOR | TA | : TANTALUM |
| | PS | : STYROL |
| | PP | : POLYPROPYLENE |
| | PT | : MYLAR |
| | MPS | : METALIZED POLYESTER |
| | MPP | : METALIZED POLYPROPYLENE |
| | ALB | : BIPOLAR |
| | ALT | : HIGH TEMPERATURE |
| | ALR | : HIGH RIPPLE |

**Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.**

**Note: Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.**

## 5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

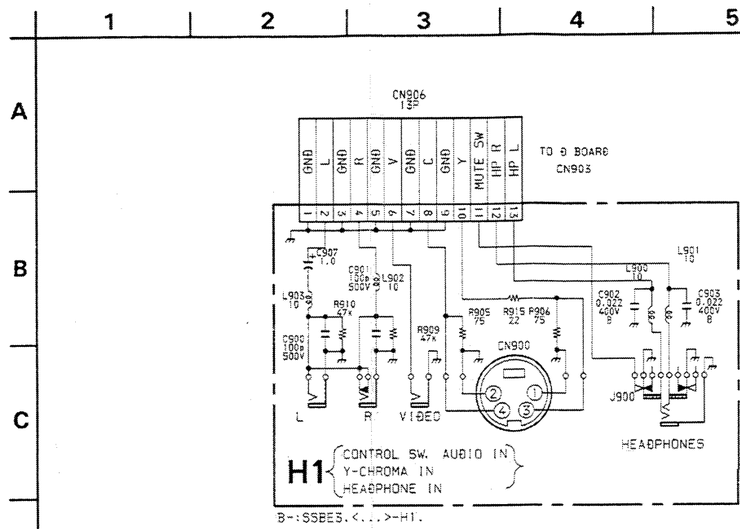
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytic.
- Indication of resistance, which dose not have one for rating electrical power, is as follows.

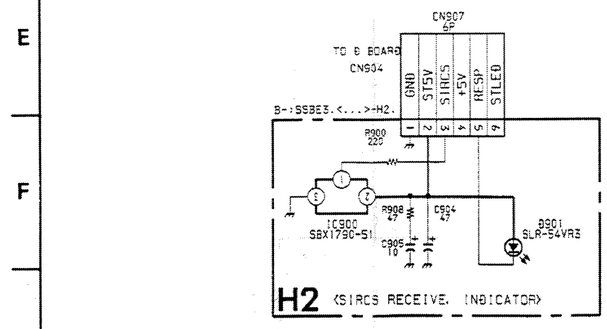
  Pitch : 5mm
  Rating electrical power : ¼W

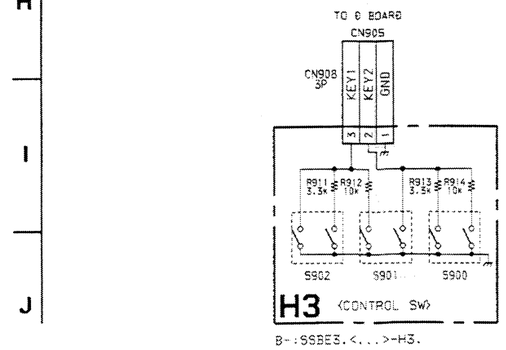
- Chip resistor is in 1/10W.
- All resistors are in ohms. kΩ = 1000Ω, MΩ = 1000KΩ
- : nonflammable resistor.
- : fusible resistor.
- △ : internal component.
- ▭ : panel designation or adjustment for repair.
- All variable and adjustable resistors have charactristic curve B, unless otherwise noted.
- All voltages are in V.
- Readings are taken with a 10MΩ digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- : B+ bus.
- : B− bus.
- : signal path.(RF)
- : earth - ground
- : earth - chassis

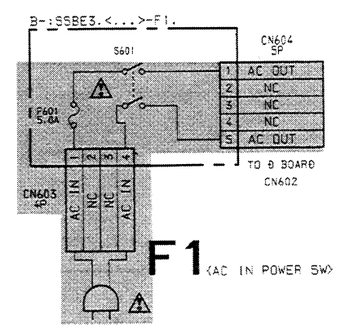






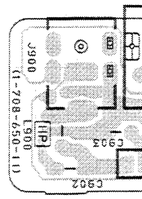



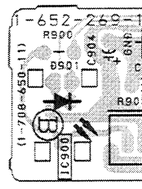




## H1

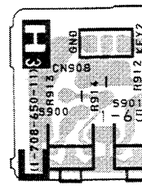
– H1 BOARD



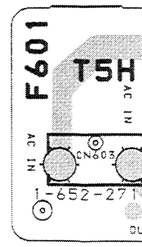
– H2 BOARD



– H3 BOARD



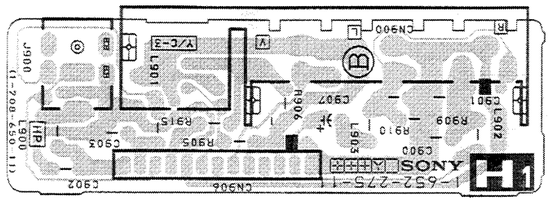
– F1 BOARD



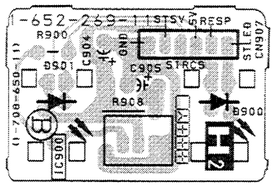
**H1** [CONTROL SW, AUDIO IN Y-CHROMA IN, HEADPHONE IN] **H2** [SIRCS RECEIVE INDICATOR] **H3** [CONTROL SW] **F1** [AC IN POWER SW] **D** [HV OUT PIN OUT POWER SUPPLY]

**NOTE:**
The circuit in
600 Vp-p. Car
inspection or r

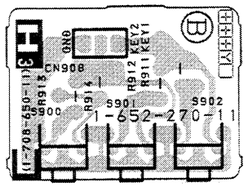
**– H1 BOARD –**



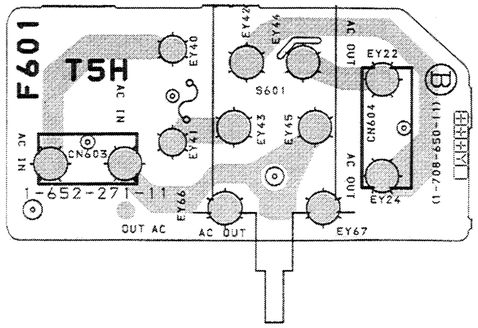

**– H2 BOARD –**



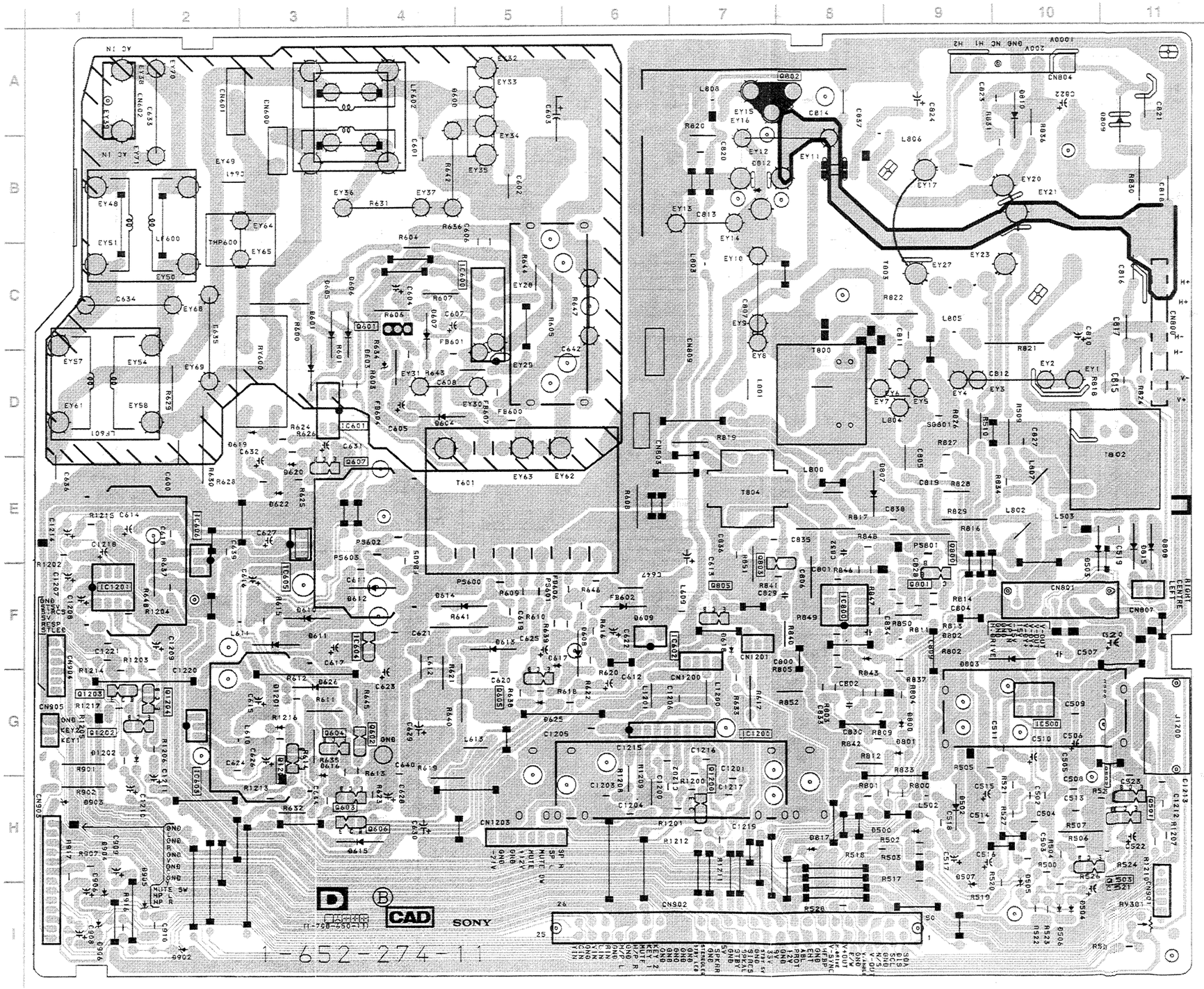

**– H3 BOARD –**




**– F1 BOARD –**



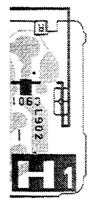

**– D BOARD –**

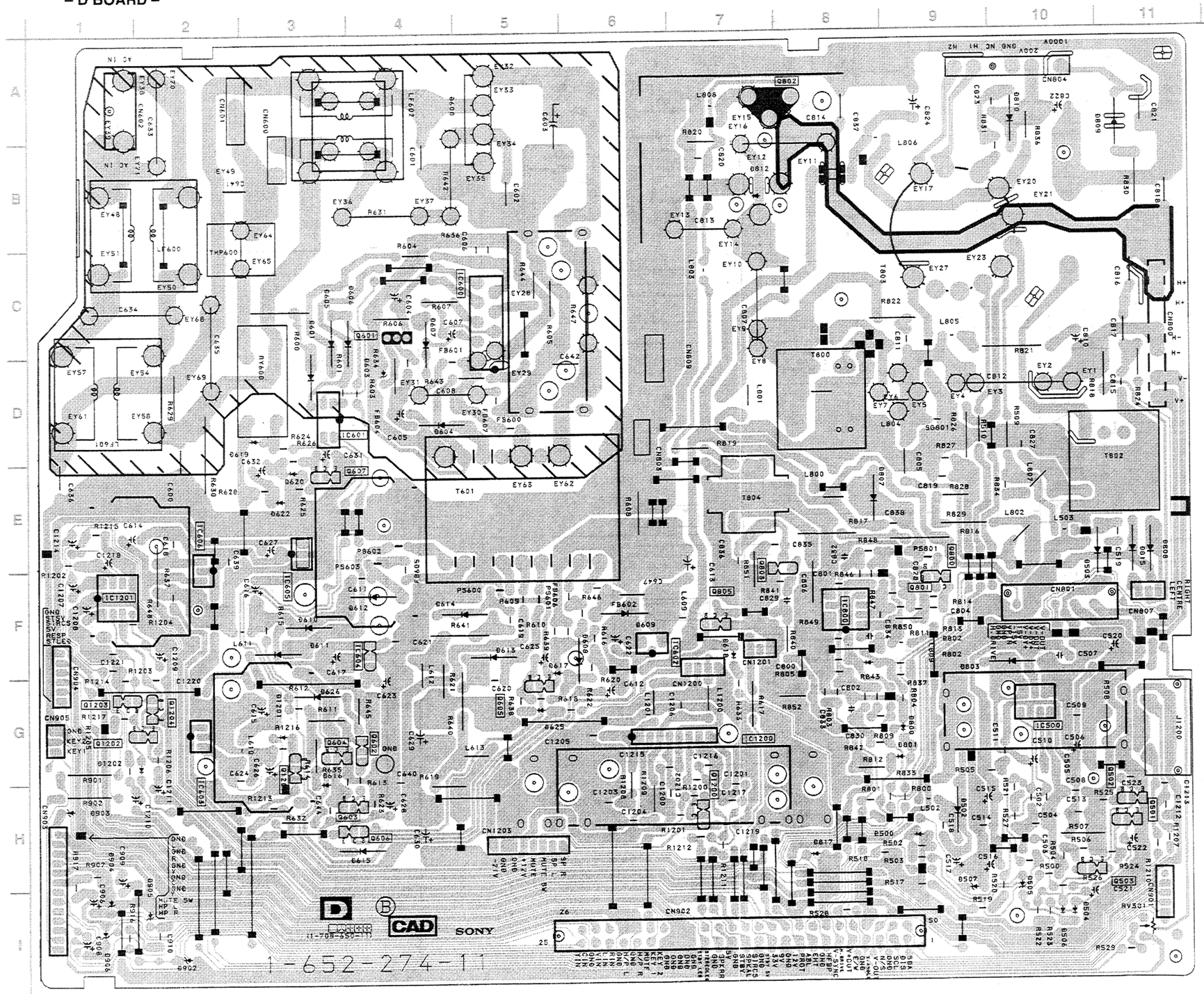


H2 [SIRCS RECEIVE INDICATOR] **H3** [CONTROL SW] **F1** [AC IN POWER SW] **D** [HV OUT PIN OUT POWER SUPPLY]

**NOTE:**
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

**– D BOARD –**






| IC | |
|---|---|
| IC500 | G - 10 |
| IC600 | C - 5 |
| IC601 | D - 4 |
| IC602 | F - 7 |
| IC603 | H - 2 |
| IC604 | F - 4 |
| IC605 | F - 3 |
| IC606 | E - 2 |
| IC800 | F - 8 |
| IC1200 | G - 7 |
| IC1201 | F - 1 |

| TRANSISTOR | |
|---|---|
| Q501 | H - 11 |
| Q502 | H - 11 |
| Q503 | I - 11 |
| Q601 | C - 4 |
| Q602 | G - 4 |
| Q603 | H - 3 |
| Q604 | G - 3 |
| Q605 | G - 5 |
| Q606 | H - 4 |
| Q607 | E - 4 |
| Q800 | E - 9 |
| Q801 | F - 9 |
| Q802 | A - 8 |
| Q803 | F - 7 |
| Q805 | F - 7 |
| Q1200 | H - 7 |

| DIODE | |
|---|---|
| D500 | G - 9 |
| D502 | G - 9 |
| D503 | F - 10 |
| D504 | I - 10 |
| D505 | I - 10 |
| D506 | I - 10 |
| D507 | G - 9 |
| D600 | A - 4 |
| D601 | C - 3 |
| D603 | D - 4 |
| D604 | D - 4 |
| D605 | C - 3 |
| D606 | C - 4 |
| D607 | C - 4 |
| D608 | F - 6 |
| D609 | F - 6 |
| D610 | F - 3 |
| D611 | F - 3 |
| D612 | F - 4 |
| D613 | F - 5 |
| D614 | F - 4 |
| D615 | H - 4 |
| D616 | G - 3 |
| D617 | F - 5 |
| D618 | F - 7 |
| D619 | D - 2 |
| D620 | E - 3 |
| D622 | E - 3 |
| D625 | G - 5 |
| D626 | G - 3 |
| D800 | G - 9 |
| D801 | G - 9 |
| D802 | F - 9 |
| D803 | F - 9 |
| D807 | E - 9 |
| D808 | E - 11 |
| D809 | A - 11 |
| D810 | A - 10 |
| D812 | B - 7 |
| D815 | E - 11 |
| D817 | H - 8 |
| D902 | I - 2 |
| D903 | H - 1 |
| D904 | H - 1 |
| D905 | H - 2 |
| D906 | I - 1 |

D HV OUT
PIN OUT
POWER SUPPLY

CN602 5P — TO CN600 2P

Q600 D4SB60L-F
C603 220 400V
JW014 5MM
JW128 10MM
R600 39k 5W
D601 EM1

Q601 2SC3852A
R647 0.1 1/2W :RF
R634 22
R603 10k
C606 1000p 500V
C605 10 100V
C604 100
R636 1k
R604 1.8k
D603 MTZJ-T-77-6.8C AMP
IC600 STR-S6708 POWER-CONTROL
C GND B D IN D OUT OCP F/B INH
FB601 1.1
R606 (JW) 12 5W
D607 EG1Z
C607 220 25V
R607 1Ω 1W :RS
R605 0.27 2W :RS
C608 1500P 2kV E
R644 100

CN901 5P — SERVICE CONNECTOR

| | | |
|---|---|---|
| GND | SCL | SDA |
| 1 | 2 | 3 |
| DIS | NC | |
| 4 | 5 | |

CN902 50P

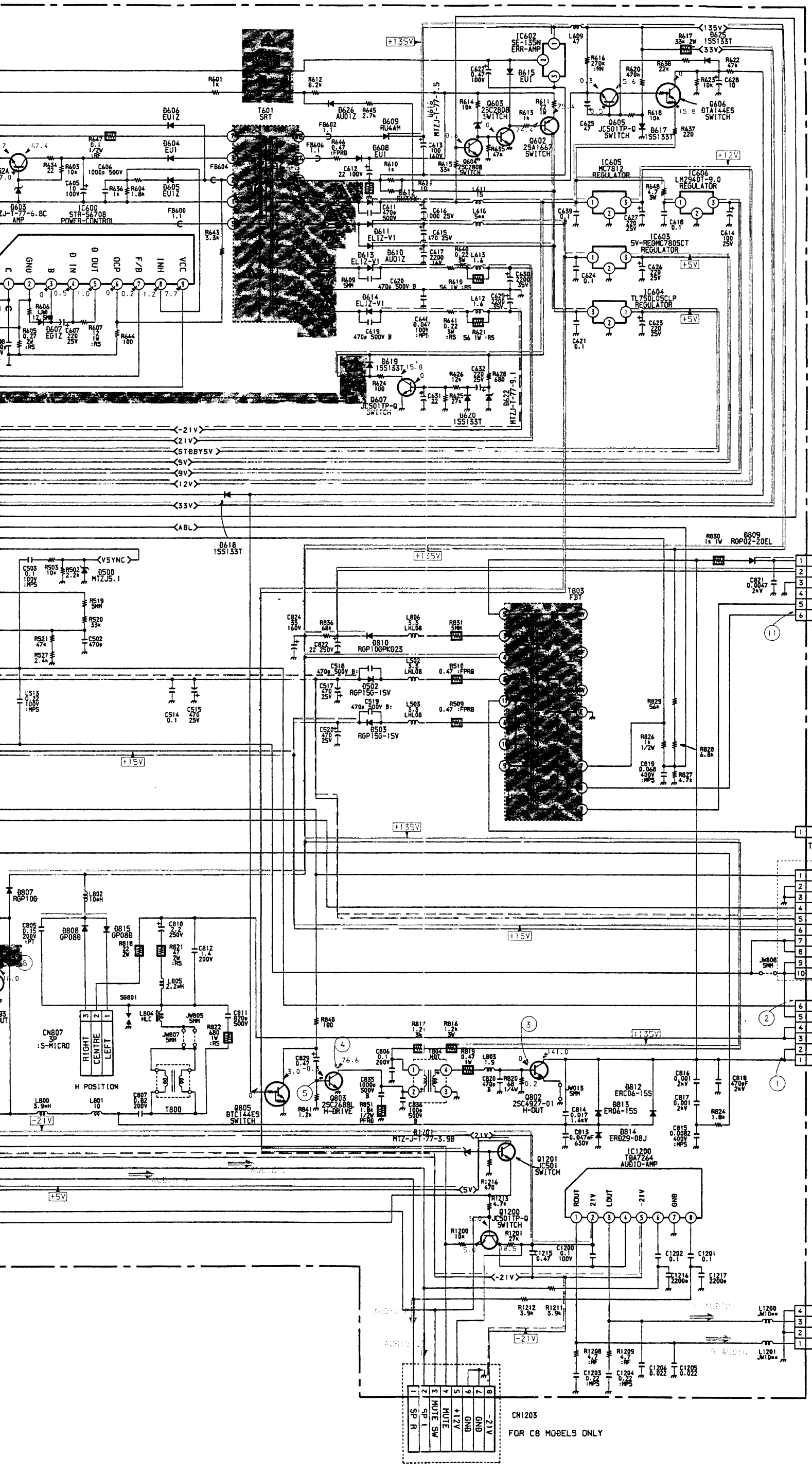
SDA, DIS, SCL, GND, N/S, V-OUT, V.ANGLE, GND, E/W, V+OUT, H DRIVE, V-SYNC, HFBP, GND, EHT, ABL, PROT, 12V, GND, 9V, 33V, STBY 5V, GND, SIRCS, AUDIO L, STBY, GND, 5V, AUDIO R, GND, STEREOLED, STBY LED, GND, GND, GND, GND, GND, KEY 2, KEY 1, MUTE, H/P R, GND, H/P L, GND, RIN, LIN, VIN, GND, CIN, YIN

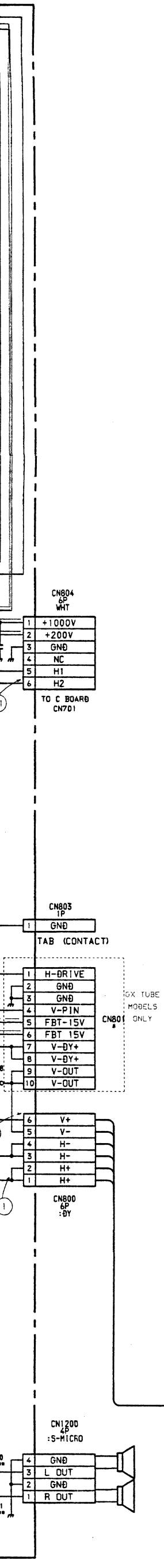
+21V
R833 2.2k :FPRD
R522 22k
R525 22k
C522 10
Q504 1SS133T
Q505 MTZJ-T-77-3.6A
Q506 1SS133T
Q507 MTZJ-T-77-5.1B
Q501 JC501TP-Q SWITCH
R524 4.7k
R525 4.7k
C521 10 25V
Q502 JA101-Q SWITCH
Q503 DTC144ES SWITCH
R526 2.2k
RV301 470k
R517 1.8k
R518 1.8k
R528
R529
+33V
+SAW
EHT
HDRIVE
VPIN
E/W
HFBP
+12V
+5V
R812 2.2k
R852 18k 1/4W
R842 100k
C830 4.7nF
R843 390k
R803 3.3k
R805 4.7k
C801 0.01
R837 15k
R802 15k
R804 12k
D802 1SS133
D801 1SS133
D817 MTZJ5.6
C800 0.0056 50V
L809 47μH
D800 1SS133
C1207 100 16V
C1214 100 16V
IC1201 TBA2822M HEADPHONE AMP
R1204 2.2k
C1209 4.7
C1211 2.2
R1206 8.2k
C1210 2.2
R1205 8.2k
C1208 4.7
R1203 2.2k
C1218 220 16V
R1202 10 :FPRD
Q1202 DTC114ES SWITCH
Q1204 DTC143TS SWITCH
R1217 47k
Q1203 DTC143TS SWITCH
IC800 LM393P 5V CONTROL
R917 22
R907 75
R916 22
R902 59 1/2W :RC
R901 59 1/2W :RC
D902 MTZJ9.1
D903 MTZJ9.1
D904 MTZJ9.1
D905 MTZJ9.1
D906 MTZJ9.1
C909 1.0
C906 47
C910 0.01
C908 47
TO A BOARD CN001

IC500 STV9379 VERTICAL OUTPUT
V+I/P, VCC, F.B.-PLS, VEE, OUT-PUT, VCC (OUT), V-I/P
C503 0.1 100V :MPS
R503 10k
R502 2.2k
D500 MTZJ5.1
VSYNC
R519 5MM
R520 33k
C502 470p
R521 47k
R527 2.4k
C510 220
C507 2.2 :BP
C511 0.33 63V
R500 33k
R505 1.2 :FPRD
R507 150 2W
L515 0.22 100V :MPS
D803 GP08B-V.BOOST
R504 39k
R506 12k
C504 470p
C506 470 25V
C509 0.1
R508 1.5 2W :RS
+15V

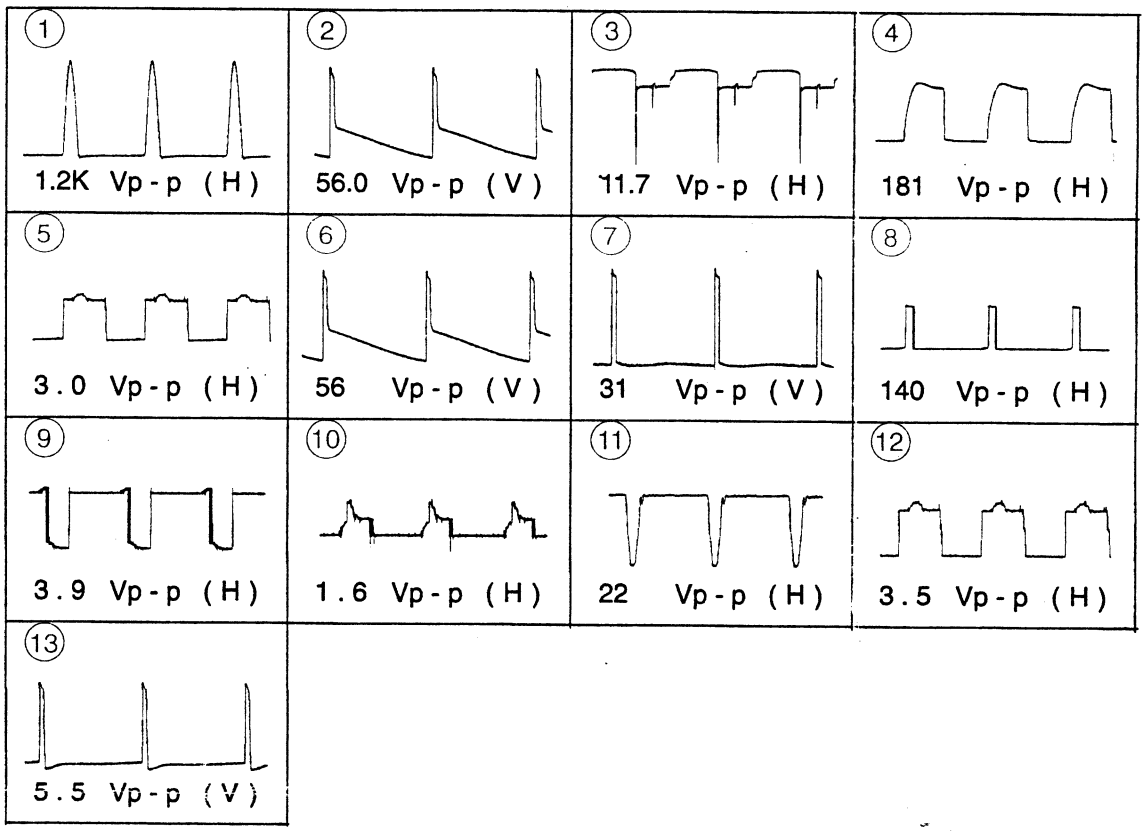
D807 RGP10G
L802 10mH
R847 330k 1/4W
R846 100k
C832 1nF
R848 220k
D808 GP08B
D815 GP08B
R818 2W
R849 10k
R814 330
C804 0.1
Q801 2SC4793 E/W-OUT
R813 470 1W
R850 4.7k
R811 5MM (JW)
Q800 JC501TP-Q BUFFER
JW801
S6801
L804 MLC
CN807 3P :S-MICRO
RIGHT, CENTRE, LEFT
H POSITION
L800 3.9mH
L801 10
C807 0.82 200V
-21V
+5V

CN905 3P: KEY1, KEY2, GND — TO H3 BOARD CN908
CN903 13P: GND, L, GND, R, GND, V, GND, C, GND, Y, MUTE SW, HP R, HP L — TO H1 BOARD CN906
CN904 8P: GND, S15V, SIRCS, +5V, RESP, STLED — TO H2 BOARD CN907

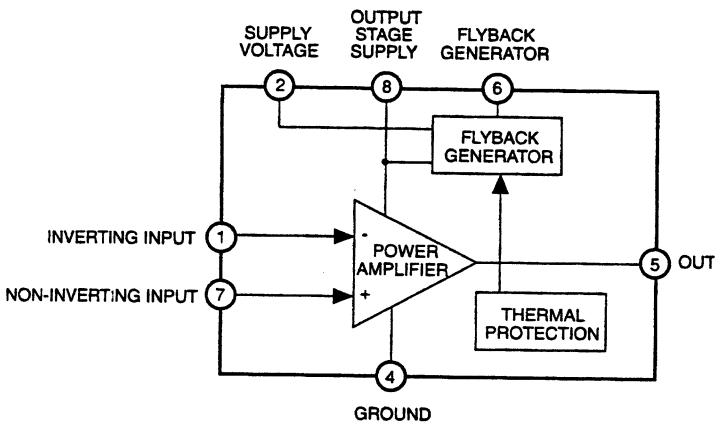

+135V
IC602 SE-135N ERR-AMP
L609 47
R617 33k 2W
D625 1SS133T
135V
33V
R616 270k :RN
R620 470k
R638 22k
R622 47k
C622 0.47 100V
D615 EU1
R623 10k
C628 10
Q606 DTA144ES SWITCH
Q605 JC501TP-Q SWITCH
D617 1SS133T
R637 220
C625 47
R618 10k
R614 10k
Q603 2SC2808 SWITCH
R611 22 1W
R613 1k
Q602 2SA1667 SWITCH
R635 47k
Q604 2SC2808 SWITCH
D601 MTZJ-T-77-7.5
C613 100 160V
R615 33k
T601 SRT
D606 EU1Z
D604 EU1
D605 EU1Z
D608 EU1
D609 RU4AM
D626 AU01Z
R645 2.7k
FB602 1.1
FB606 1.1
FB604
FB600 1.1
R646 0.47 :FPRB
C612 22 100V
R610 1k
R647 0.1 1/2W :RF
R634 22
R603 10k
C606 1000p 500V
C605 10 100V
R636 1k
R604 1.8k
D603 MTZJ-T-77-6.8C
IC600 STR-S6708 POWER-CONTROL
R643 3.3k
R612 6.2k
R401 1k
D612 RU3AM
R633 10
L611 15
L610 5ea
C611 470p 500V
C616 1000 25V
D611 EL1Z-V1
C615 470 25V
D613 EL1Z-V1
D610 AU01Z
C617 2200 16V
R640 0.22 3W :RS
L613 1.6
R609 5WH
C620 470p 500V B
R619 56 1W :RS
C650 2200 35V
D614 EL1Z-V1
L612 1.6
C629 2200 35V
C644 0.047 100V :MPS
R641 0.22 3W :RS
R621 56 1W :RS
C619 470p 500V B
D619 1SS133T
R624 100
Q607 JC501TP-Q SWITCH
R626 12k
C632 220 25V
R628 680
C651 22
R625 27k
D620 1SS133T
D622 MTZJ-T-77-9.1
IC605 MC7812 REGULATOR
IC606 LM2940T-9.0 REGULATOR
+12V
R648 4.7 5W
C639 0.1
C627 220 25V
C618 0.1
C614 100 25V
IC603 5V-REGMC7805CT REGULATOR
+5V
C624 0.1
C626 220 25V
IC604 TL750L05CLP REGULATOR
C621 0.1
C623 220 25V
C
GND
B
D IN
D OUT
OCP
F/B
INH
VCC
R606 CMN 12 5W
D607 EG1Z
C607 220 25V
R607 12 1W :RS
R605 0.27 2W :RS
R644 100
-21V
21V
STBY5V
5V
9V
12V
33V
ABL
D618 1SS133T
VSYNC
C503 0.1 100V :MPS
R503 10k
R502 2.2k
D500 MTZJS.1
R519 5WH
R520 33k
R521 47k
C502 470p
R527 2.4k
C513 0.22 100V :MPS
C514 0.1
C515 470 25V
+15V
+135V
T803 FBT
C824 33 160V
R834 68k
L806 5.3 LHL08
R831 5WH
C822 22 250V
D810 RGP10GPKG23
C518 470p 500V B
L502 5.3 LHL08
R510 0.47 :FPRB
C517 470 25V
D502 RGP15G-15V
C519 470p 500V B
L503 5.3 LHL08
R509 0.47 :FPRB
C520 470 25V
D503 RGP15G-15V
R829 56k
R826 1k 1/2W
R828 6.8k
C819 0.068 400V :MPS
R827 4.7k
D809 RGP02-20EL
R830 1k 1W
CN804 6P WHT
1 +1000V
2 +200V
3 GND
4 NC
5 H1
6 H2
TO C BOARD CN701
C821 0.0047 2kV
CN803 1P
1 GND
TAB (CONTACT)
CN801 6P
1 H-DRIVE
2 GND
3 GND
4 V-PIN
5 FBT-15V
6 FBT 15V
7 V-DY+
8 V-DY+
9 V-OUT
10 V-OUT
GX TUBE MODELS ONLY
JW808 5WH
CN800 6P :DY
6 V+
5 V-
4 H-
3 H-
2 H+
1 H+
D807 RGP10G
L802 10mH
C805 0.15 200V :PT
D808 GP08B
D815 GP08B
C810 2.2 250V
R818 22 2W
R821 47 2W :RS
C812 1.4 200V
L805 2.2mH
S6801
CN807 3P :S-MICRO
RIGHT
CENTRE
LEFT
H POSITION
L804 HLC
JW805 5WH
JW807 5WH
C811 820p 500V
R822 680 1W :RS
L800 3.9mH
L801 10
C807 0.82 200V
T800
Q805 BTC144ES SWITCH
R840 100
R817 1.2k 3W
R816 1.2k 3W
C829 0.47
Q803 2SC2688L H-DRIVE
R841 1.2k
C806 0.1 200V
T804 HOT
R815 0.47 1W
L803 1.9
C835 1000p 500V B
R851 1.8k 1/2W PFRB
C836 100p 500V B
C820 470p B
R820 68 1/4W
Q802 2SC4927-01 H-OUT
JW013 5WH
C814 0.017 1.4kV
D812 ERC06-15S
D813 ER06-15S
D814 ERB29-08J
C816 0.001 2kV
C817 0.001 2kV
C818 470pF 2kV
C815 0.0082 400V :MPS
R824 1.6k
D1201 MTZ-J-T-77-3.9B
Q1201 JC501 SWITCH
R1216 470
R1213 4.7k
Q1200 JC501TP-Q SWITCH
R1200 10k
R1201 27k
C1215 0.47
C1200 0.1 100V
IC1200 TBA7264 AUDIO-AMP
ROUT
21V
LOUT
-21V
GNB
C1202 0.1
C1201 0.1
C1216 2200
C1217 2200
CN1200 4P :S-MICRO
4 GND
3 L OUT
2 GND
1 R OUT
L1200 JW10ea
L1201 JW10ea
R1212 3.9k
R1211 3.9k
R1208 4.7 :RF
R1209 4.7 :RF
C1203 0.22 :MPS
C1204 0.22 :MPS
C1206 0.022
C1205 0.022
AUDIO R
AUDIO L
+5V
CN1203
FOR C8 MODELS ONLY
SP R
SP L
MUTE SW
MUTE
+12V
GND
GND
-21V



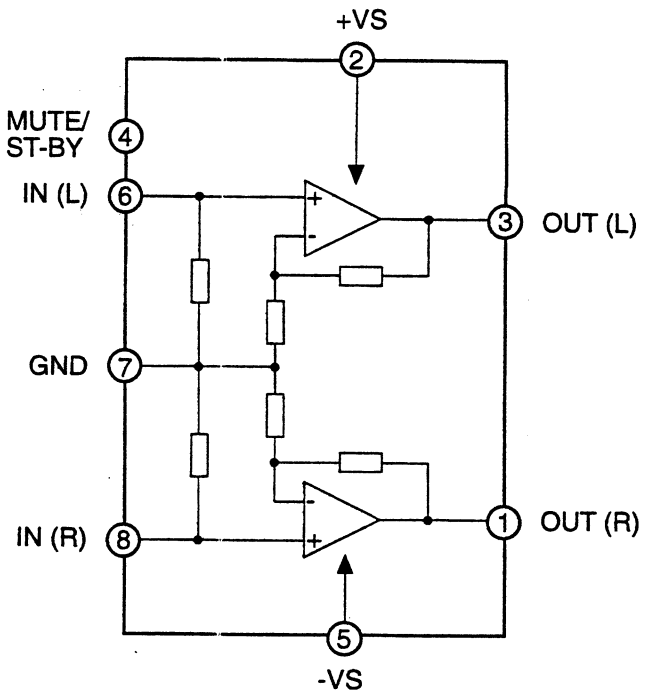

## WAVEFORMS D BOARD



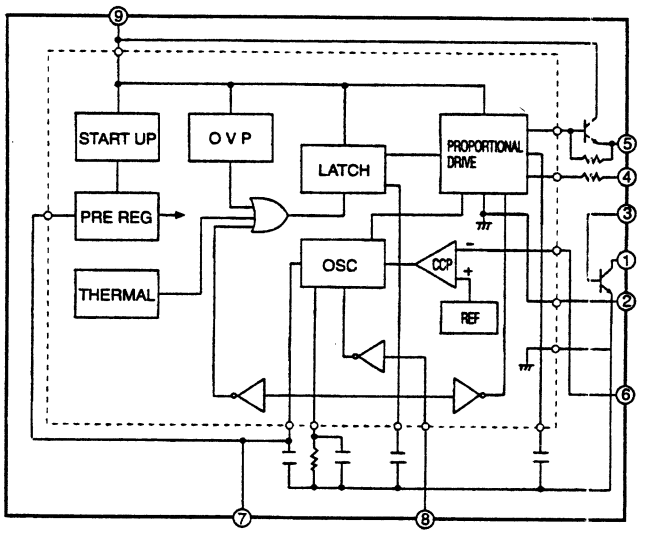

## D BOARD IC500 STV9379

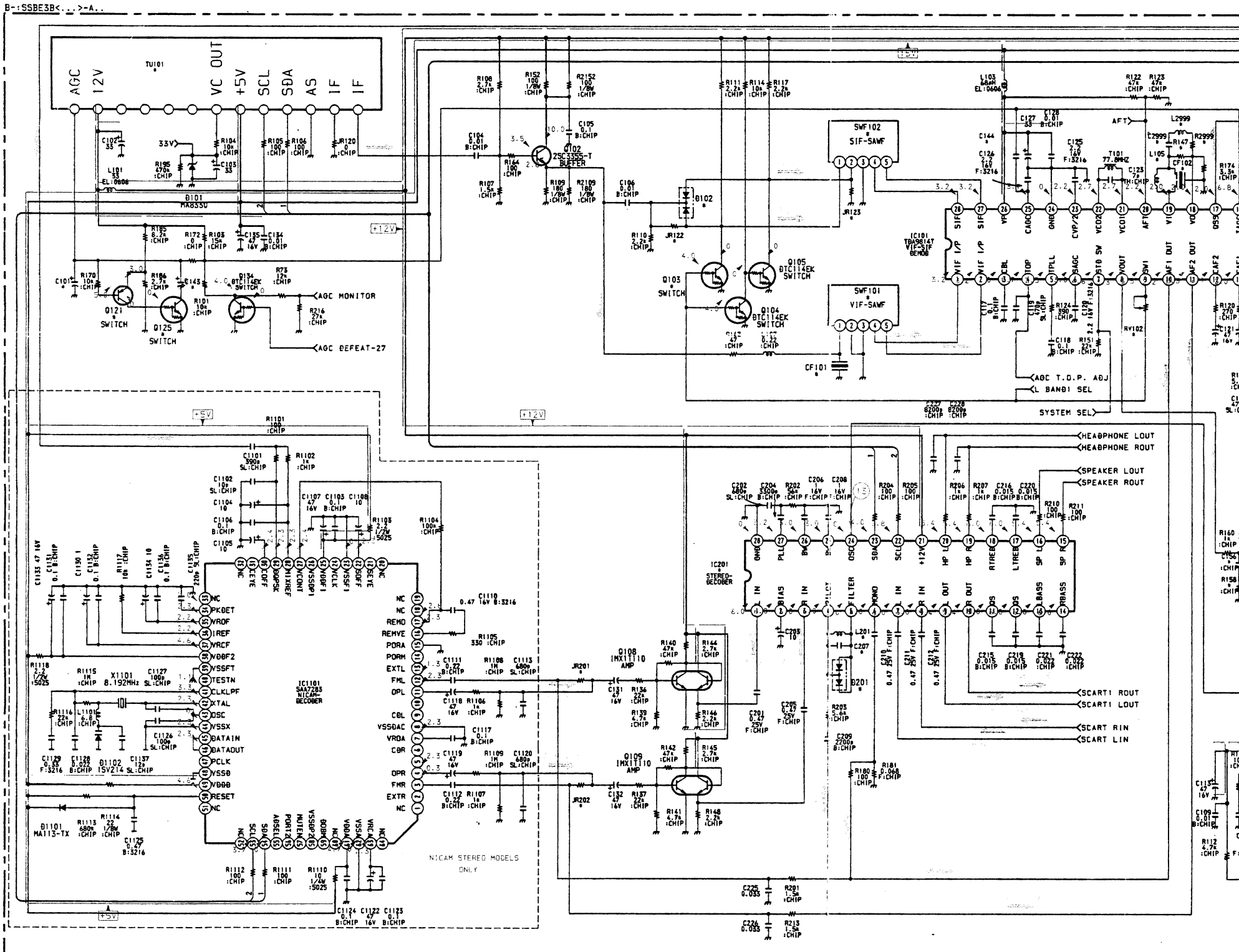


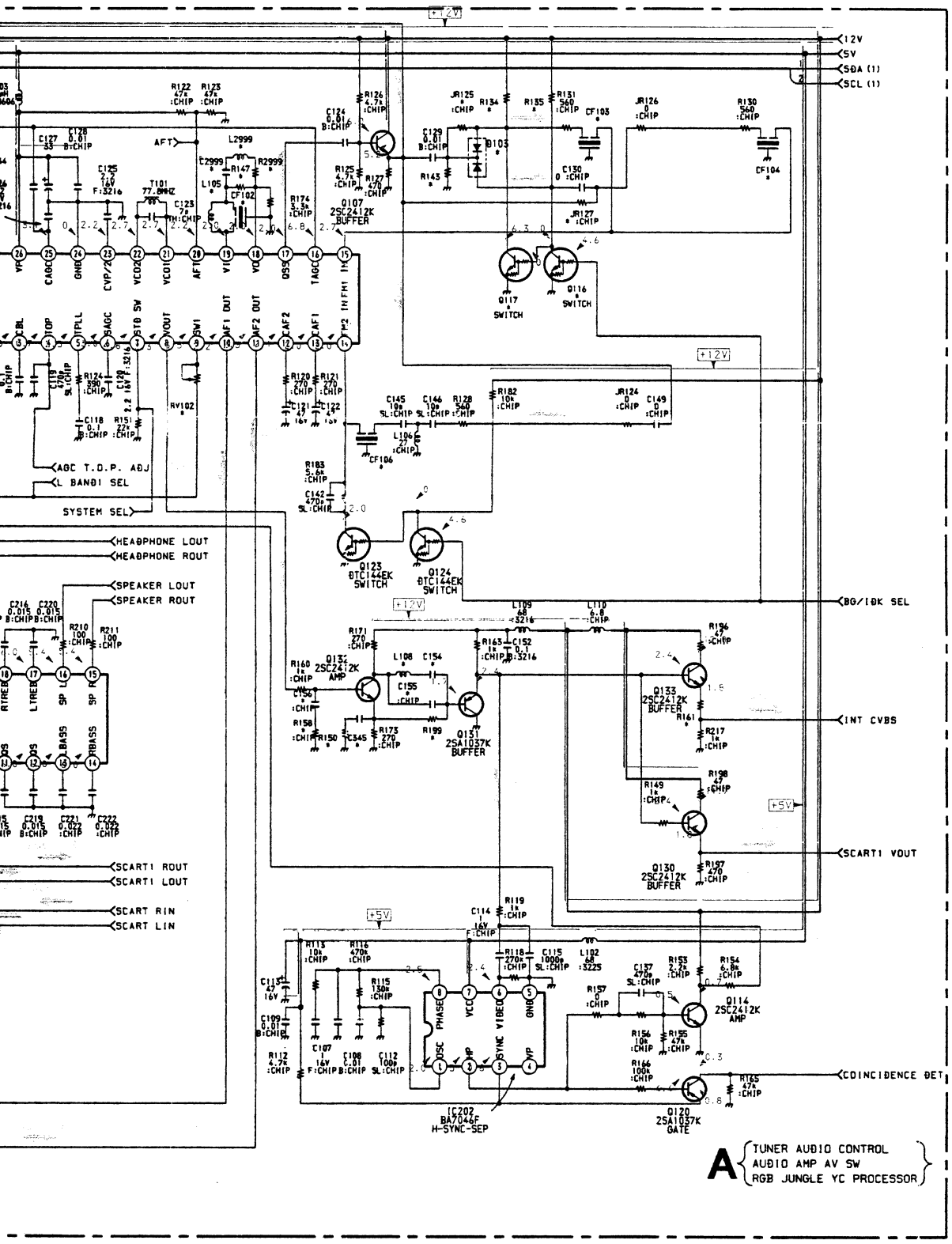

## D BOARD IC1200 TDA7264

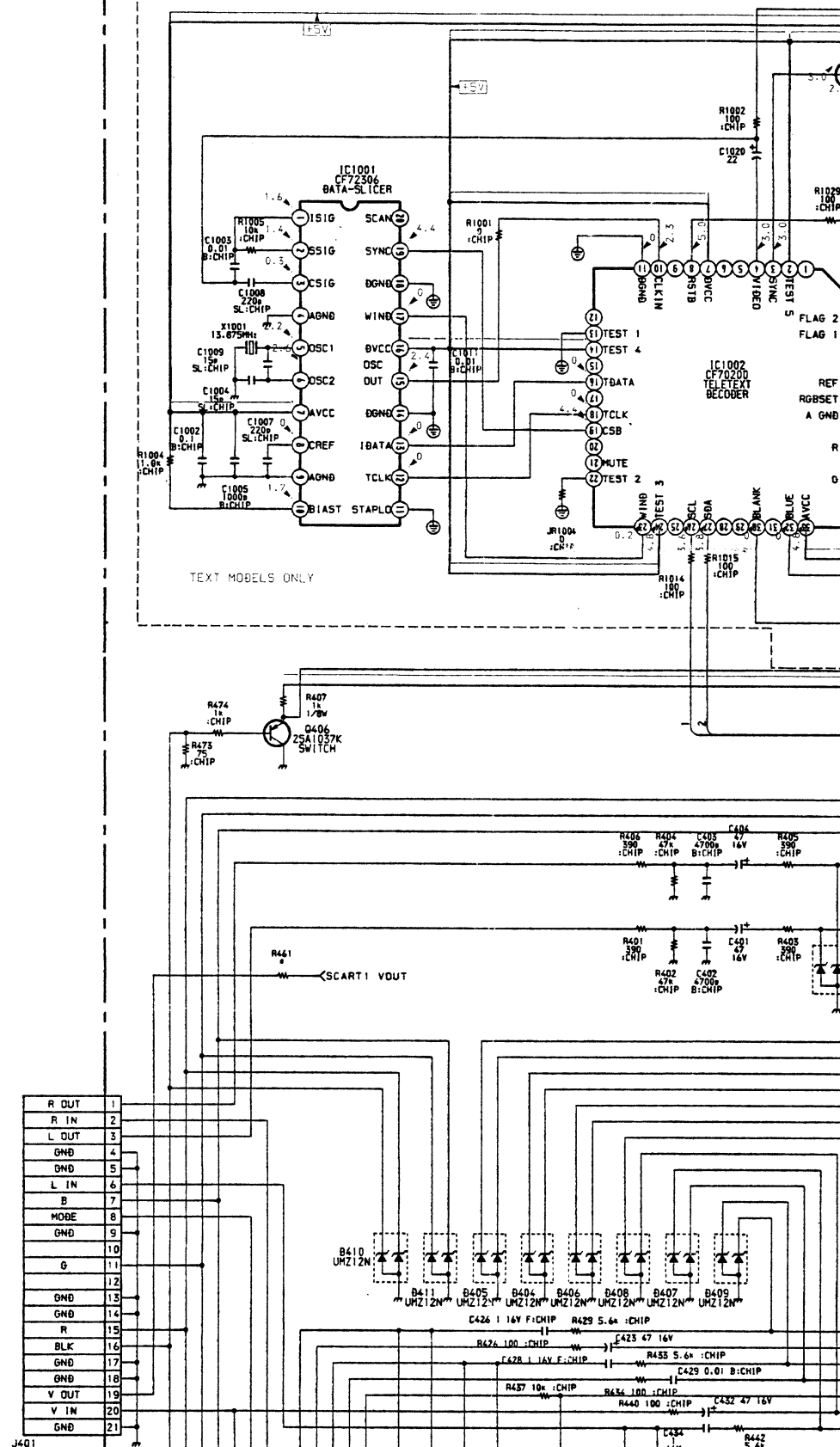



## D BOARD IC600 STR-S6708




B-:SSBE3B<...>-A..
TU101
AGC
12V
VC OUT
+5V
SCL
SDA
AS
IF
IF
+12V
+5V
IC101
TDA9814T
VIF-SIF
DEMOD
SWF102
SIF-SAWF
SWF101
VIF-SAWF
Q101
MA8350
Q102
2SC3355-T
BUFFER
Q103
SWITCH
Q104
BTC114EK
SWITCH
Q105
BTC114EK
SWITCH
Q121
SWITCH
Q125
SWITCH
Q134
BTC114EK
SWITCH
AGC MONITOR
AGC DEFEAT-27
AGC T.D.P. ADJ
L BAND1 SEL
SYSTEM SEL
AFT
T101
77.8MHZ
L2999
CF102
CF101
RV102
IC1101
SAA7285
NICAM-
DECODER
X1101
8.192MHz
Q1101
MA113-TX
Q1102
1SV214
NICAM STEREO MODELS
ONLY
IC201
STEREO-
DECODER
Q108
IMX11110
AMP
Q109
IMX11110
AMP
D201
HEADPHONE LOUT
HEADPHONE ROUT
SPEAKER LOUT
SPEAKER ROUT
SCART1 ROUT
SCART1 LOUT
SCART RIN
SCART LIN

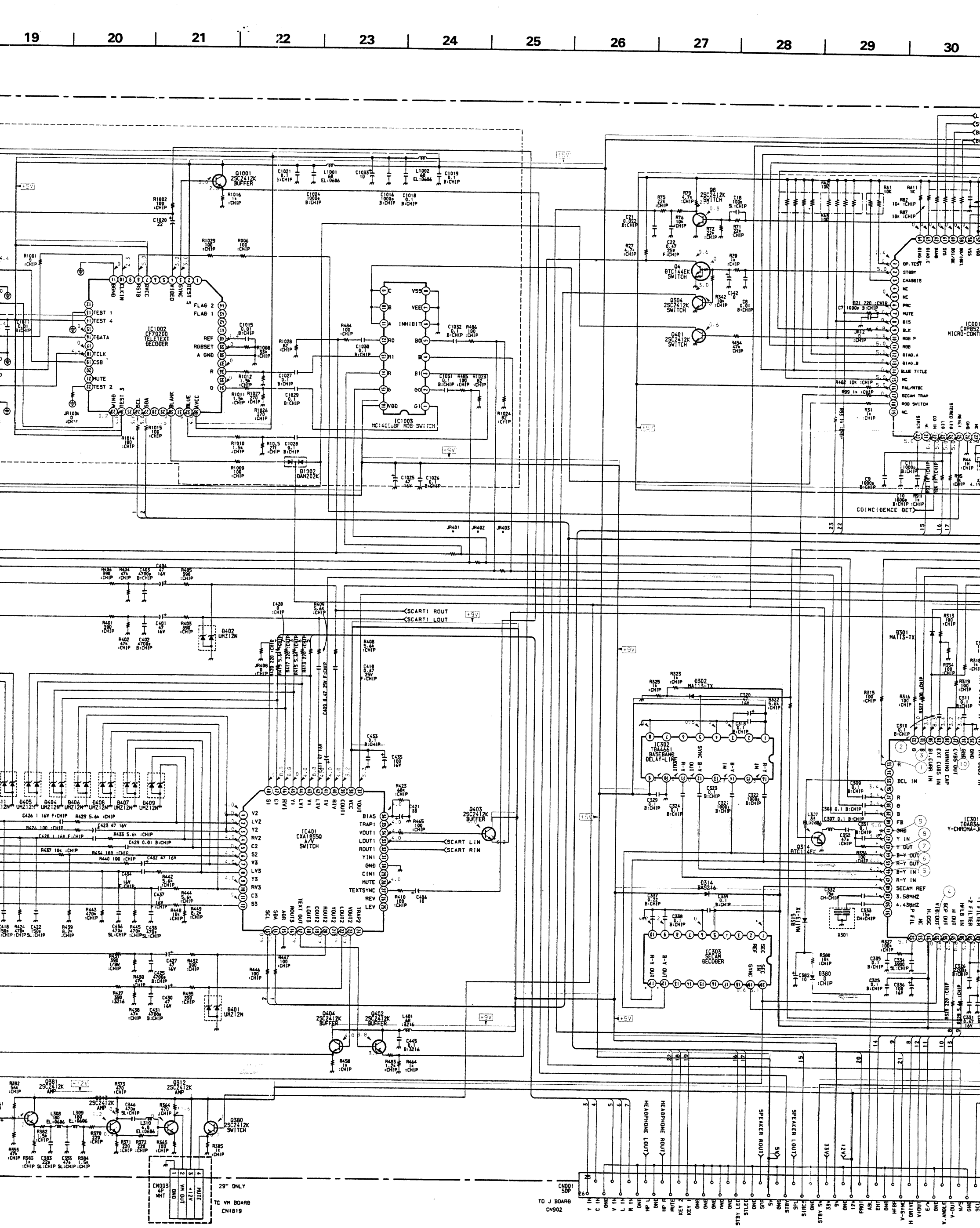


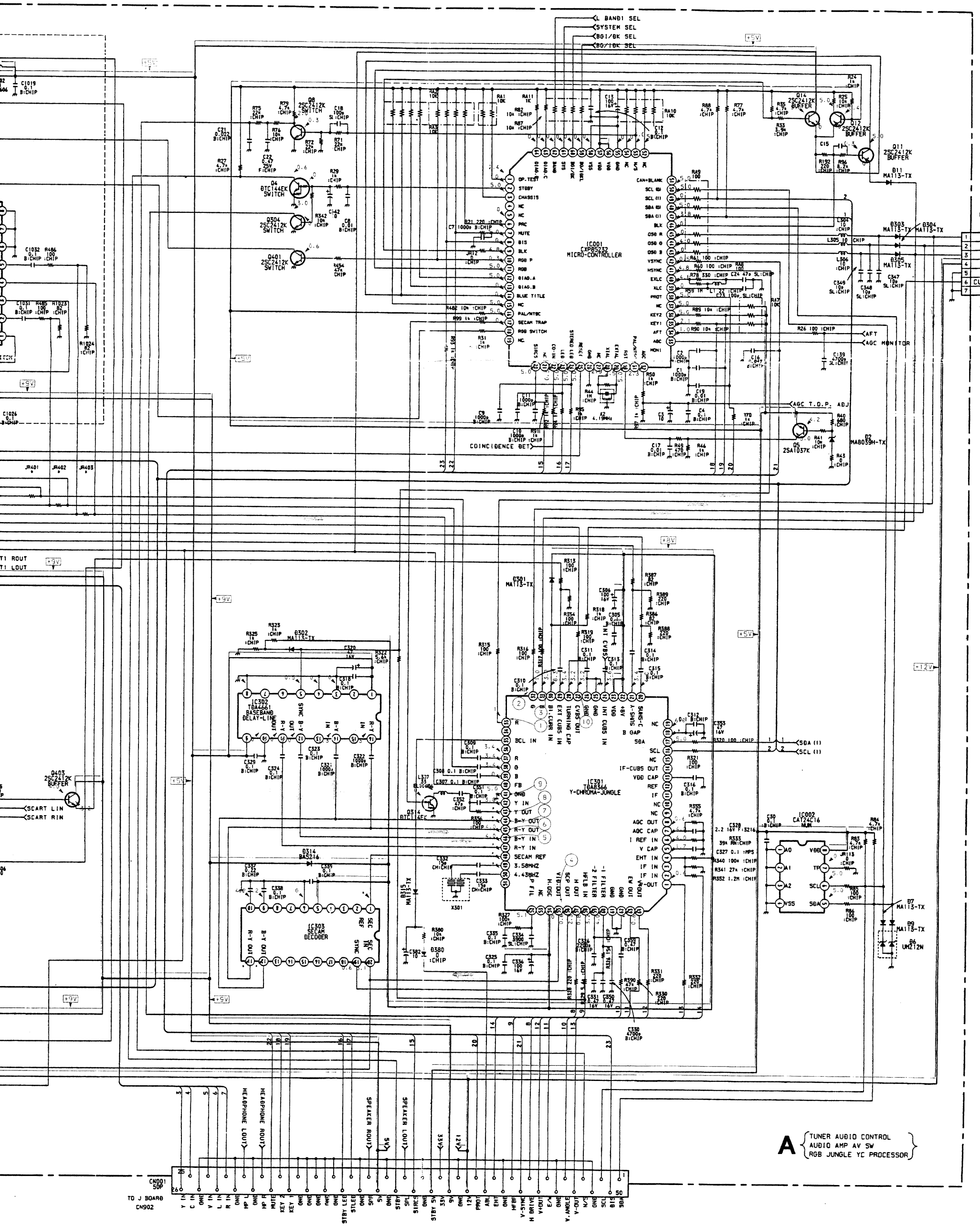




Voltages indicated with the mark ※ on the schematic diagram are shown in the table below.

## A BOARD

| IC | Pin | PAL | SECAM | NTSC 3.58 | NTSC 4.43 |
|---|---|---|---|---|---|
| IC301 | 17 | 4.0 | 4.0 | 4.0 | 0 |
| | 35 | 3.6 | 2.5 | 3.5 | 3.5 |
| | 44 | 1.5 | 3.1 | 1.5 | 1.5 |
| | 45 | 1.5 | 3.0 | 1.5 | 1.5 |
| | 48 | 1.7 | 4.4 | 1.6 | 1.7 |
| | 49 | 1.4 | 1.4 | 2.0 | 1.4 |
| | 50 | 2.0 | 2.0 | 1.4 | 2.0 |
| | 63 | 3.4 | 2.5 | 2.2 | 2.5 |
| IC303 | 1 | 1.7 | 4.4 | 1.6 | 1.7 |
| | 11 | 1.5 | 3.0 | 1.5 | 1.5 |
| | 12 | 1.5 | 3.1 | 1.5 | 1.5 |


IC1002 CF7020D TELETEXT DECODER
IC1003 MC14053BF RGB SWITCH
IC401 CXA1855Q A/V SWITCH
IC302 TDA4661 BASEBAND DELAY-LINE
IC303 SECAM DECODER
IC001 CXP852 MICRO-CONT
Q1001 2SC2412K BUFFER
Q8 2SC2412K SWITCH
Q4 DTC144EK SWITCH
Q304 2SC2412K SWITCH
Q401 2SC2412K SWITCH
Q403 2SC2412K BUFFER
Q404 2SC2412K BUFFER
Q402 2SC2412K BUFFER
Q381 2SC2412K AMP
Q313 2SC2412K AMP
Q312 2SC2412K AMP
Q380 2SC2412K SWITCH
Q314 DTC114EK
D1002 DAN202K
D402 UMZ12N
D401 UMZ12N
D405 UMZ12N
D404 UMZ12N
D406 UMZ12N
D408 UMZ12N
D407 UMZ12N
D409 UMZ12N
D301 MA113-TX
D302 MA113-TX
D315 MA113-TX
D314 BAS216
D380
X501
COINCIDENCE DET
SCART1 ROUT
SCART1 LOUT
SCART LIN
SCART RIN
HEADPHONE LOUT
HEADPHONE ROUT
SPEAKER LOUT
SPEAKER ROUT
CN003 4P WHT
GND
VM OUT
+12V
MUTE
29" ONLY
TO VM BOARD
CN1819
CN001 50P
TO J BOARD
CN902
+5V
+9V
+12V

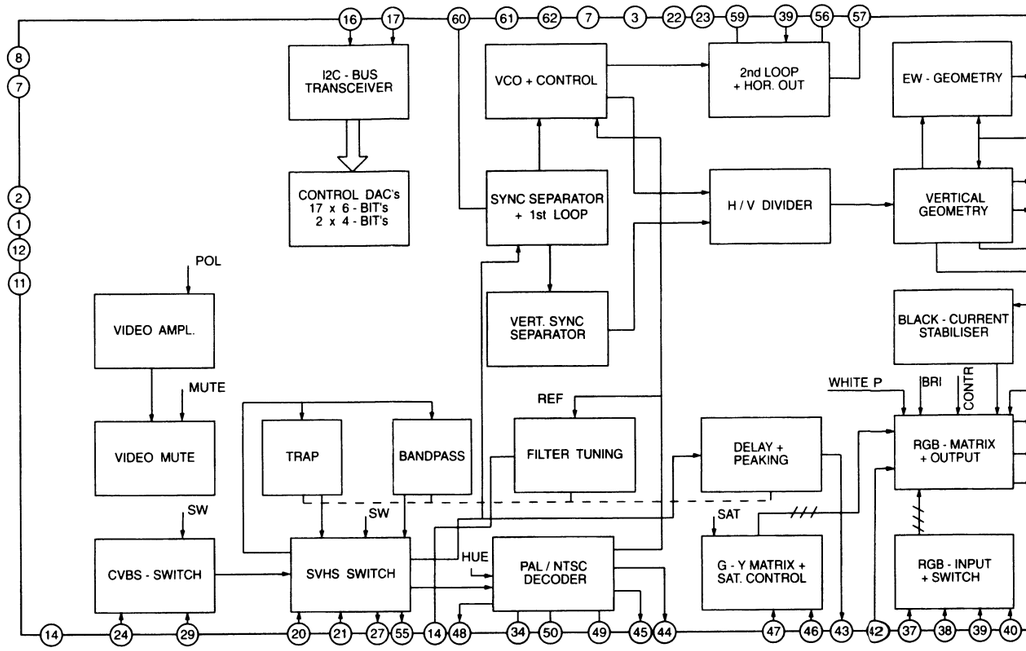

L BAND1 SEL
SYSTEM SEL
BG1/BK SEL
BG/10K SEL
IC001
CXP85232
MICRO-CONTROLLER
IC301
T0AB366
Y-CHROMA-JUNGLE
IC302
T0A4661
BASEBAND
DELAY-LINE
IC303
SECAM
DECODER
IC002
CAT24C16
NVM
CN002
7P
WHT
R
G
B
+12V
GND
CUT OFF
GND
TO C BOARD
CN703
AFT
AGC MONITOR
AGC T.D.P. ADJ
SCART L IN
SCART R IN
SDA (1)
SCL (1)
CN001
50P
TO J BOARD
CN902
HEADPHONE LOUT
HEADPHONE ROUT
SPEAKER ROUT
SPEAKER LOUT
A
TUNER AUDIO CONTROL
AUDIO AMP AV SW
RGB JUNGLE YC PROCESSOR

## A BOARD * MARK

| Ref | X2901D | X2901A | X2900B | X2901B | X2903E | X2902L | X2902U | X2901K |
|---|---|---|---|---|---|---|---|---|
| C101 | 22mF | 22mF | 4.7mF | 4.7mF | 22mF | 22mF | 22mF | 22mF |
| C143 | - | - | 100mF 16V | 100mF 16V | - | - | - | - |
| C144 | - | - | 1mF | 1mF | - | - | - | - |
| C154 | 180pF | 180pF | 150pF | 150pF | 180pF | - | - | 180pF |
| C155 | 47pF | 47pF | 33pF | 33pF | 47pF | - | - | 47pF |
| C156 | 18pF | 18pF | - | - | 18pF | - | - | 18pF |
| C207 | 0.0018mF 100V | 0.0018mF 100V | 0.0018mF 100V | 0.0018mF 100V | 0.0018mF 100V | - | - | 0.0018mF 100V |
| CF101 | EFCV4045A4 | EFCV4045A4 | EFCV4045A4 | EFCV4045A4 | EFCV4045A4 | - | - | EFCV4045A4 |
| CF102 | 5.5mHz | 5.5mHz | 5.5mHz/6.6mHz | 5.5mHz/6.6mHz | 5.5mHz | 6.0mHz | 6.0mHz | 5.5mHz |
| CF103 | 5.5mHz | 5.5mHz | 5.5mHz | 5.5mHz | 5.5mHz | - | - | 5.5mHz |
| CF104 | 6.5mHz | - | 6.0mHz | 6.0mHz | - | SFE6.0MB | SFE6.0MB | 6.5mHz |
| CF106 | 5.75mHz | 5.75mHz | 5.75mHz | 5.75mHz | 5.75mHz | - | - | 5.75mHz |
| D102 | - | - | DAN202K | DAN202K | - | - | - | - |
| D103 | DAN202K | - | DAN202K | DAN202K | - | - | - | DAN202K |
| D201 | DA204K | DA204K | DA204K | DA204K | DA204K | - | - | DA204K |
| IC201 | TDA6612 | TDA6612 | TDA6612 | TDA6612 | TDA6612 | TDA6622 | TDA6622 | TDA6612 |
| IC303 | TDA8395T | - | TDA8395T | TDA8395T | - | - | - | TDA8395T |
| JR122 | 0 :CHIP | 0 :CHIP | - | - | 0 :CHIP | 0 :CHIP | 0 :CHIP | 0 :CHIP |
| JR123 | 0 :CHIP | 0 :CHIP | - | - | 0 :CHIP | 0 :CHIP | 0 :CHIP | 0 :CHIP |
| JR125 | - | 0 :CHIP | - | - | 0 :CHIP | - | - | - |
| JR127 | - | - | - | - | - | 0 :CHIP | - | - |
| JR201 | 0 :CHIP | 0 :CHIP | 0 :CHIP | 0 :CHIP | - | - | - | 0 :CHIP |
| JR202 | 0 :CHIP | 0 :CHIP | 0 :CHIP | 0 :CHIP | - | - | - | 0 :CHIP |
| JR401 | - | - | 0 :CHIP | - | - | - | - | - |
| JR402 | - | - | 0 :CHIP | - | - | - | - | - |
| JR403 | - | - | 0 :CHIP | - | - | - | - | - |
| L105 | 15µH | 15µH | 8.2µH | 8.2µH | 15µH | 15µH | 15µH | 15µH |
| L108 | 15µH | 15µH | 27µH | 27µH | 15µH | - | - | 15µH |
| L201 | 4.7mmH | 4.7mmH | 4.7mmH | 4.7mmH | 4.7mmH | - | - | 4.7mmH |
| Q103 | - | - | DTC114EK | DTC114EK | - | - | - | - |
| Q116 | DTC144EK | - | DTC144EK | DTC144EK | - | - | - | DTC144EK |
| Q117 | DTC144EK | - | DTC144EK | DTC144EK | - | - | - | DTC144EK |
| Q121 | - | - | 2SA1037K | 2SA1037K | - | - | - | - |
| Q125 | - | - | DTC114EK | DTC114EK | - | - | - | - |
| R134 | 2.2K | - | 2.2K | 2.2K | - | - | - | 2.2K |
| R135 | 2.2K | - | 2.2K | 2.2K | - | - | - | 2.2K |
| R143 | 2.2K | - | 2.2K | 2.2K | - | - | - | 2.2K |
| R147 | 270 | 270 | 150 | 150 | 270 | 270 | 270 | 270 |
| R158 | 12K | 12K | - | - | 12K | - | - | 12K |
| R199 | 330 | 330 | 470 | 470 | 330 | - | - | 330 |
| RV102 | - | - | 22K | 22K | - | - | - | - |
| SWF101 | K3953M | K3953M | K3953M | K3953M | K3953M | J3950M | J3950M | K3953M |
| SWF102 | K9350M | K9350M | K9453M | K9453M | K9350M | K9350M | K9350M | K9350M |
| TU101 | UV-916H | UV-916H | UV-916H | UV-916H | UV-916H | U-944C | U-944C | UV-916H |

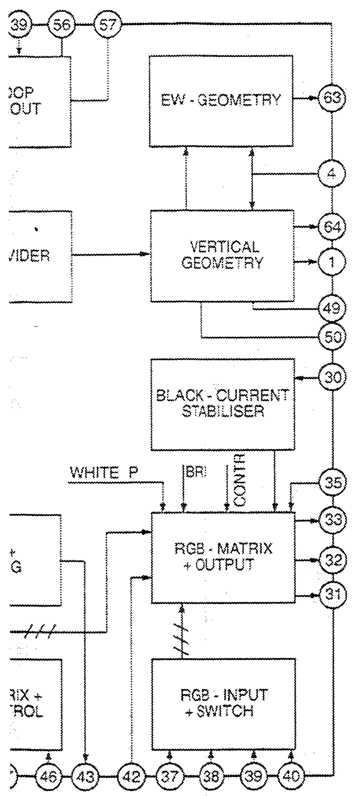


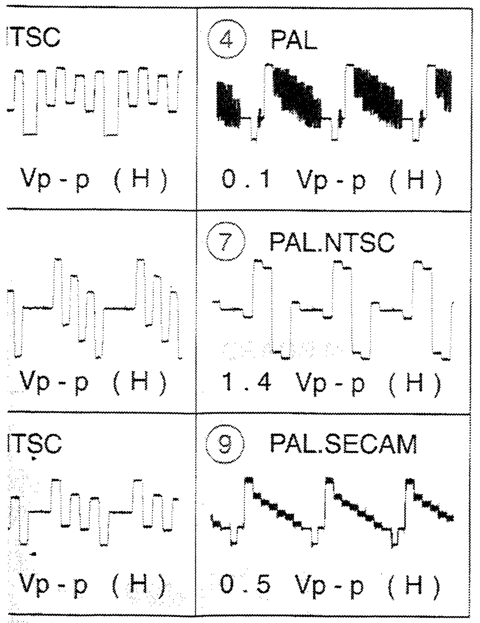
## A BOARD IC301 TDA8366T




## WAVEFORMS A BOARD

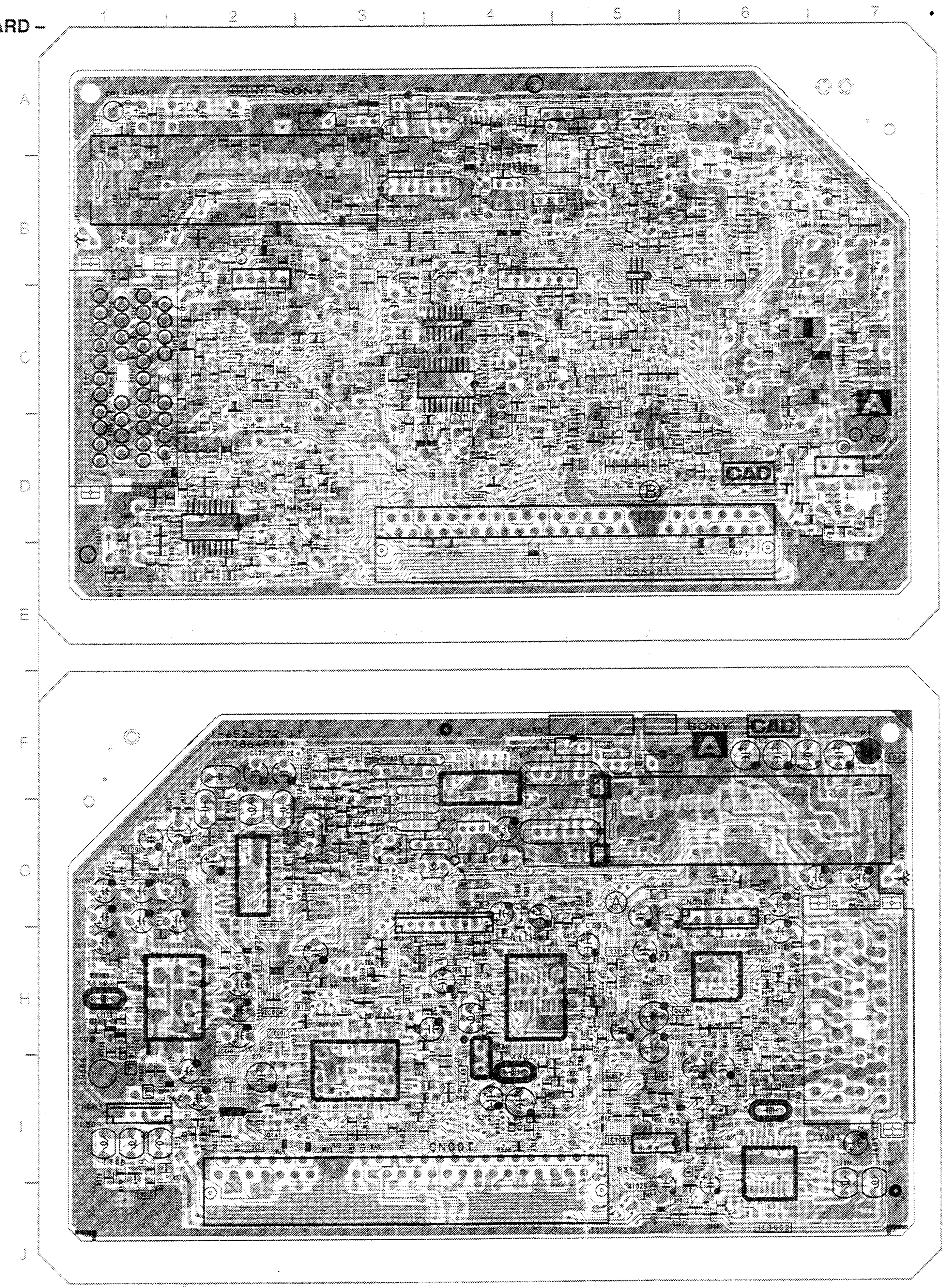
| | | | | |
|---|---|---|---|---|
| ① 3.5 Vp-p (H) | ② 3.0 Vp-p (H) | ③ PAL.SECAM 2.5 Vp-p (H) | ③ NTSC 2.3 Vp-p (H) | ④ PA 0.1 V |
| ④ SECAM 1.1 Vp-p (H) | ④ NTSC 0.9 Vp-p (H) | ⑤ 1.0 Vp-p (H) | ⑥ 1.4 Vp-p (H) | ⑦ PA 1.4 V |
| ⑦ SECAM 1.1 Vp-p (H) | ⑧ PAL 0.8 Vp-p (H) | ⑧ SECAM 1.5 Vp-p (H) | ⑧ NTSC 0.9 Vp-p (H) | ⑨ PA 0.5 V |
| ⑨ NTSC 0.4 Vp-p (H) | ⑩ 1.0 Vp-p (H) | | | |






## – A BOARD –



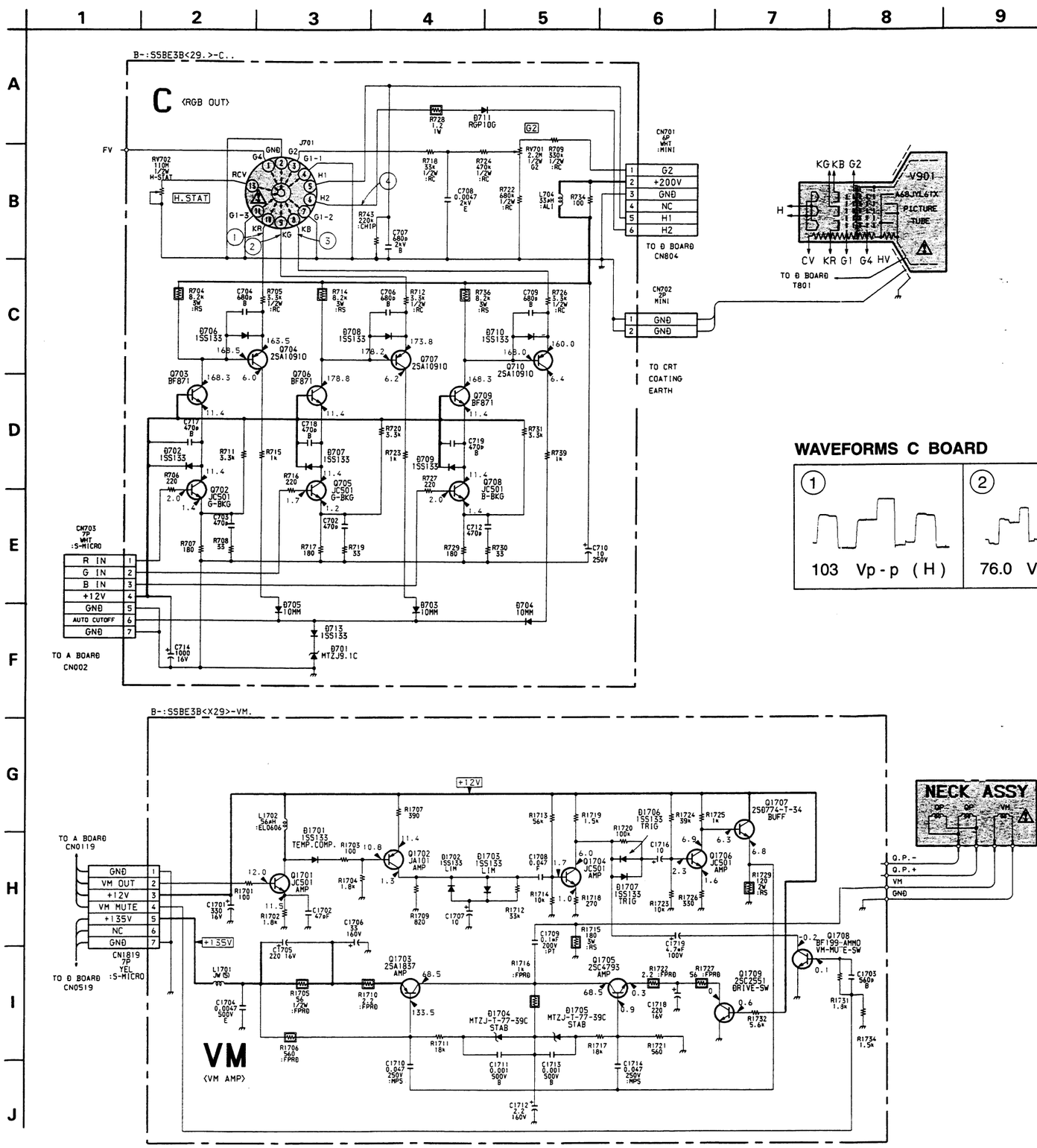

| IC | |
|---|---|
| IC001 | H - 2 |
| IC002 | I - 2 |
| IC101 | F - 4 |
| IC201 | G - 2 |
| IC202 | B - 5 |
| IC301 | H - 5 |
| IC302 | C - 4 |
| IC303 | C - 4 |
| IC401 | H - 6 |
| IC1001 | D - 2 |
| IC1002 | J - 6 |
| IC1003 | I - 5 |
| IC1101 | H - 2 |

| TRANSISTOR | |
|---|---|
| Q4 | D - 6 |
| Q8 | C - 5 |
| Q11 | D - 5 |
| Q12 | C - 5 |
| Q14 | I - 2 |
| Q102 | F - 5, A - 3 |
| Q103 | B - 3 |
| Q104 | B - 3 |
| Q105 | B - 3 |
| Q107 | B - 5 |
| Q108 | G - 2 |
| Q109 | G - 1 |
| Q114 | G - 3 |
| Q116 | G - 3 |
| Q117 | F - 3 |
| Q120 | C - 5 |
| Q121 | A - 1 |
| Q123 | B - 4 |
| Q124 | F - 3 |
| Q125 | B - 1 |
| Q130 | B - 3 |
| Q131 | G - 3 |
| Q132 | G - 3 |
| Q133 | B - 4 |
| Q304 | D - 4 |
| Q312 | E - 7 |
| Q313 | J - 1 |
| Q314 | C - 4 |
| Q380 | D - 6 |
| Q381 | D - 6 |
| Q401 | I - 5 |
| Q402 | B - 2 |
| Q403 | B - 3 |
| Q404 | G - 6 |
| Q1001 | I - 6 |
| Q1003 | J - 5 |

| DIODE | |
|---|---|
| D6 | I - 2 |
| D7 | I - 2 |
| D9 | I - 2 |
| D11 | D - 5 |
| D101 | B - 2 |
| D102 | B - 4 |
| D103 | A - 5 |
| D201 | B - 6 |
| D301 | G - 4 |
| D302 | C - 4 |
| D303 | H - 3 |
| D304 | B - 5 |
| D305 | C - 4 |
| D314 | B - 3 |
| D380 | I - 4 |
| D401 | C - 2 |
| D402 | C - 2 |
| D404 | C - 2 |
| D405 | C - 2 |
| D406 | C - 2 |
| D407 | C - 2 |
| D408 | C - 2 |
| D409 | C - 2 |
| D410 | C - 2 |
| D411 | D - 2 |
| D1002 | I - 6 |
| D1003 | J - 6 |
| D1101 | H - 1 |
| D1102 | C - 7 |

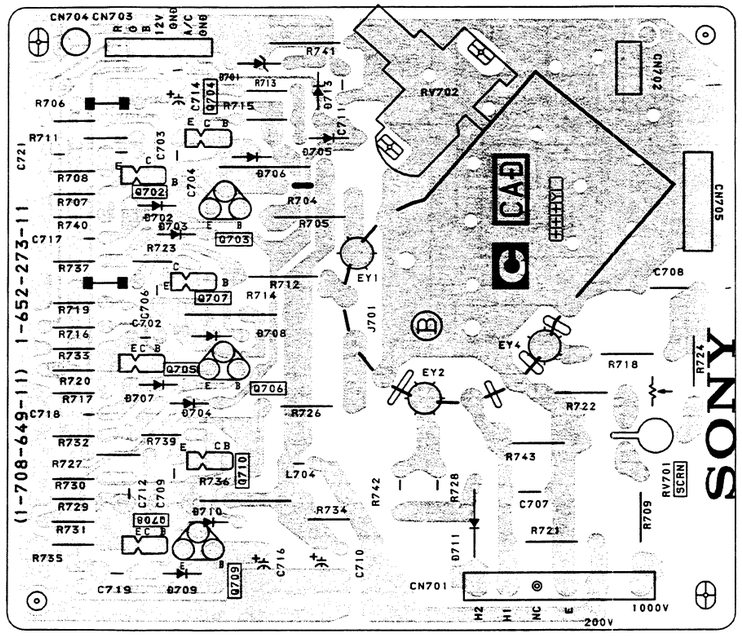
Note :

- ▒▒▒ : Pattern from the side which enables seeing.
- ▒▒▒ : Pattern of the rear side.

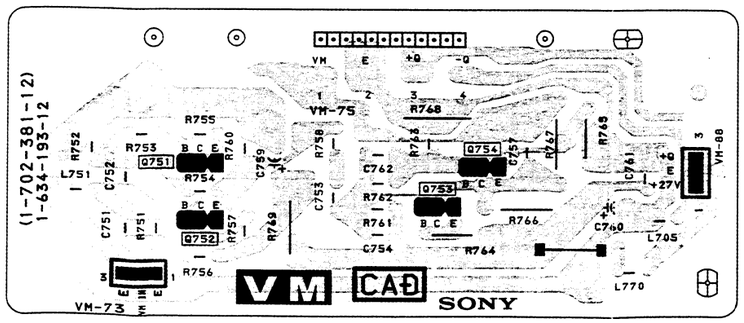

B-:SSBE3B<29.>-C..
C
<RGB OUT>
FV
J701
RV702 1.0M H-STAT
H.STAT
RCV
G4
GND
G2
G1-1
H1
H2
G1-2
G1-3
KR
KB
KG
R728 1.2 1W
D711 RGP10G
G2
R718 33k 1/2W :RC
R724 470k 1/2W :RC
C708 0.0047 2kV E
R722 680k 1/2W :RC
RV701 2.2M 1/2W G2
R709 330k 1/2W :RC
L704 33mH :ALI
R734 100
R743 220 :CHIP
C707 680p 2kV B
CN701 6P WHT :MINI
1 G2
2 +200V
3 GND
4 NC
5 H1
6 H2
TO B BOARD CN804
CN702 2P MINI
1 GND
2 GND
TO CRT COATING EARTH
KG KB G2
V901
A68JYL61X
PICTURE TUBE
H
CV KR G1 G4 HV
TO B BOARD T801
R704 8.2k 3W :RS
C704 680p B
R705 3.3k 1/2W :RC
R714 8.2k 3W :RS
C706 680p B
R712 3.3k 1/2W :RC
R736 8.2k 3W :RS
C709 680p B
R726 3.3k 1/2W :RC
D706 1SS133
Q704 2SA10910
D708 1SS133
Q707 2SA10910
D710 1SS133
Q710 2SA10910
Q703 BF871
Q706 BF871
Q709 BF871
C717 470p B
C718 470p B
C719 470p B
R720 3.3k
R731 3.3k
R739 1k
D702 1SS133
R711 3.3k
R715 1k
D707 1SS133
R723 1k
D709 1SS133
R706 220
Q702 JC501 G-BKG
R716 220
Q705 JC501 G-BKG
R727 220
Q708 JC501 B-BKG
C703 470p
C702 470p
C712 470p
R707 180
R708 33
R717 180
R719 33
R729 180
R730 33
C710 10 250V
CN703 7P WHT :S-MICRO
R IN 1
G IN 2
B IN 3
+12V 4
GND 5
AUTO CUTOFF 6
GND 7
TO A BOARD CN002
D705 10MM
D703 10MM
D704 10MM
D713 1SS133
D701 MTZJ9.1C
C714 1000 16V
WAVEFORMS C BOARD
1 103 Vp-p (H)
2 76.0 Vp-p (H)
3 100 Vp-p (H)
4 18.5 Vp-p (H)
B-:SSBE3B<X29>-VM.
+12V
TO A BOARD CN0119
GND 1
VM OUT 2
+12V 3
VM MUTE 4
+135V 5
NC 6
GND 7
CN1819 7P YEL :S-MICRO
TO B BOARD CN0519
L1702 56uH :EL0606
D1701 1SS133 TEMP.COMP.
R1703 100
Q1702 JA101 AMP
D1702 1SS133 LIM
D1703 1SS133 LIM
R1707 390
R1713 56k
R1719 1.5k
D1706 1SS133 TRIG
R1720 100k
C1716 10
R1724 39k
R1725 1k
Q1707 2S0774-T-34 BUFF
C1708 0.047 F
Q1704 JC501 AMP
D1707 1SS133 TRIG
Q1706 JC501 AMP
R1729 120 2W :RS
R1701 100
Q1701 JC501 AMP
R1702 1.8k
C1702 47pF
R1704 1.8k
R1709 820
C1707 10
R1714 10k
R1718 270
R1723 10k
R1726 330
C1706 33 160V
C1709 0.1uF 200V :PT
R1715 180 3W :RS
C1719 4.7uF 100V
Q1708 DF199-AMMO VM-MUTE-SW
+135V
C1705 220 16V
Q1703 2SA1837 AMP
R1716 1k :FPRD
Q1705 2SC4793 AMP
R1722 2.2 :FPRD
R1727 56 :FPRD
Q1709 2SC2551 DRIVE-SW
C1703 560p B
L1701 JW
R1705 56 1/2W :FPRD
R1710 2.2 :FPRD
C1704 0.0047 500V E
D1704 MTZJ-T-77-39C STAB
D1705 MTZJ-T-77-39C STAB
R1732 5.6k
R1731 1.8k
R1734 1.5k
R1706 560 :FPRD
R1711 18k
R1717 18k
R1721 560
C1710 0.047 250V :MPS
C1711 0.001 500V B
C1713 0.001 500V B
C1714 0.047 250V :MPS
C1712 2.2 160V
VM
<VM AMP>
NECK ASSY
CP CP VM
Q.P.-
Q.P.+
VM
GND

**C** [RGB OUT] **VM** [VM AMP]

**– C BOARD –**

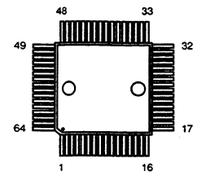



**– VM BOARD –**

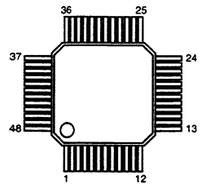



## 5.4 SEMICONDUCTORS

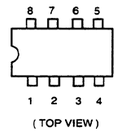
TDA8366
CF70200FN



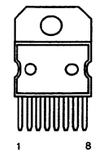

CXA1855Q
SAA7283
CXP85232



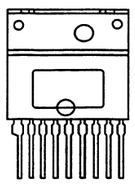

LM393
TDA7264



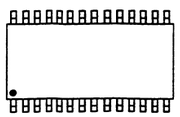

TDA7264



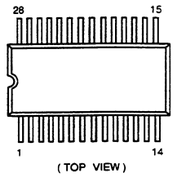

STRS6708



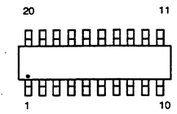
TDA6622



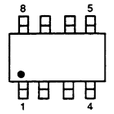
TDA9814



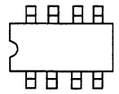

CF72306DW




CAT24C16J




BA7046
TDA2822



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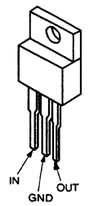
MC7805CT
LM2940T
SE135N




MC14053BF

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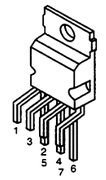
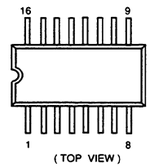
2SC2551-0
JA101
JC501TP

STV9379




TDA4661/V2

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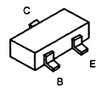
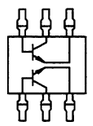
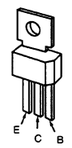
DTA144EK
2SC2412K
2SA1037-G




1MX1T110



BF871

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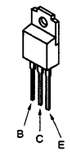
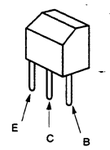
2SC4793




2SD774-34

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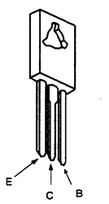
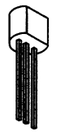
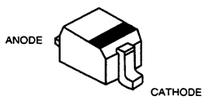


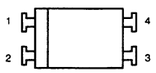

TL750L05CLP



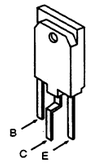
DTZ3.6A




TLP621GR




2SC4927-01

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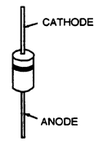
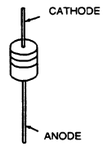
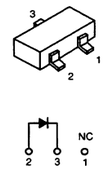
GP08DPKG23
RU-4AM
EL1Z
EU-1-V1
EU-1ZV1



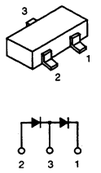

MTZJ-9.1C
MTZJ-5.1B
MTZJ-9.1
MTZJ-3.6A
MTZJ-6.8C
MTZJ-39C
1SS133



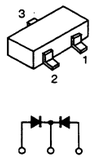

MA704WK



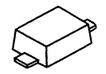

DA204K



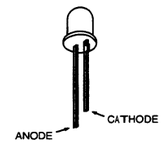

UMZ12N




MA8039
MA113



SLR-54VR3



# SECTION 6

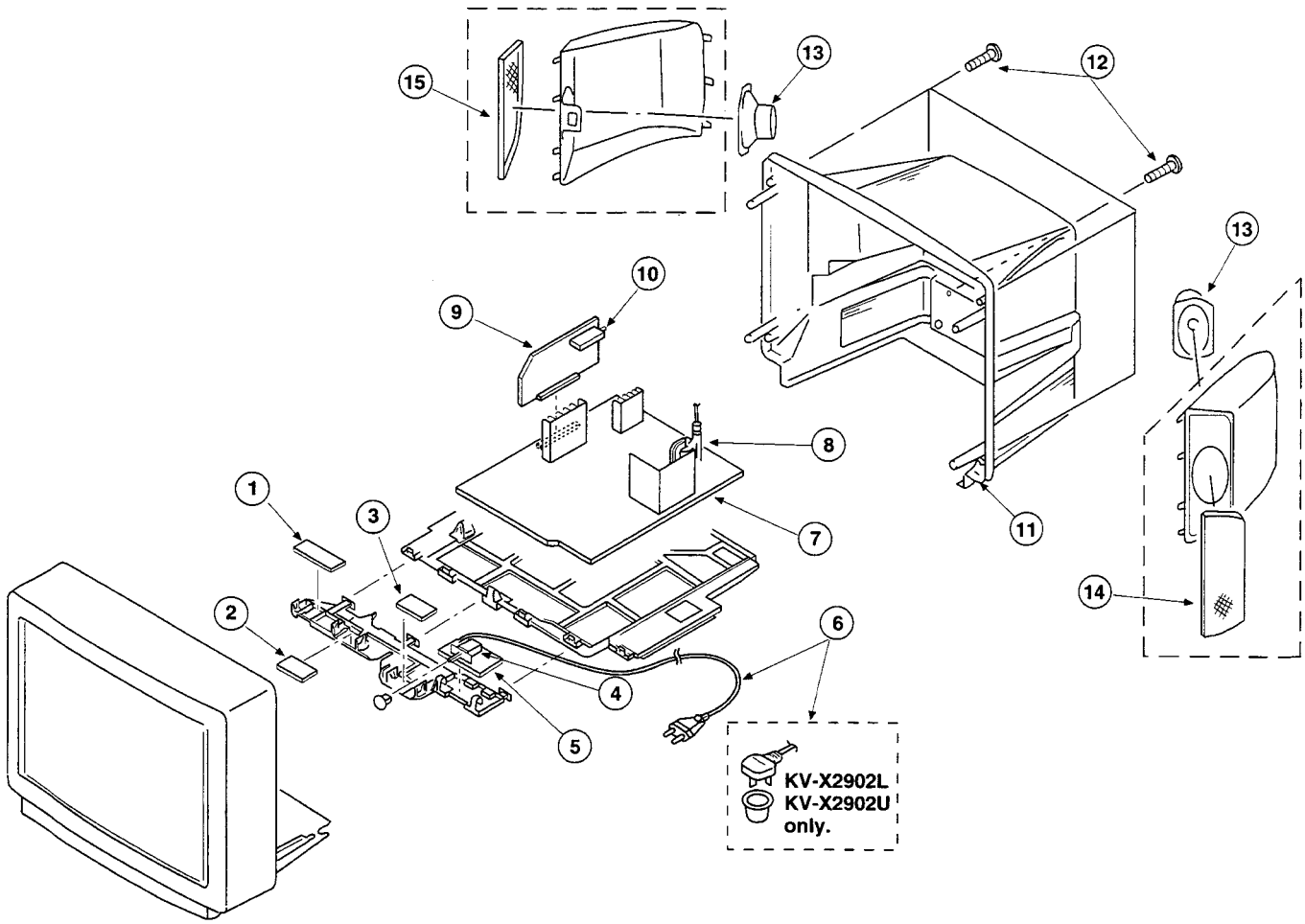
# EXPLODED VIEWS

**NOTE :**

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

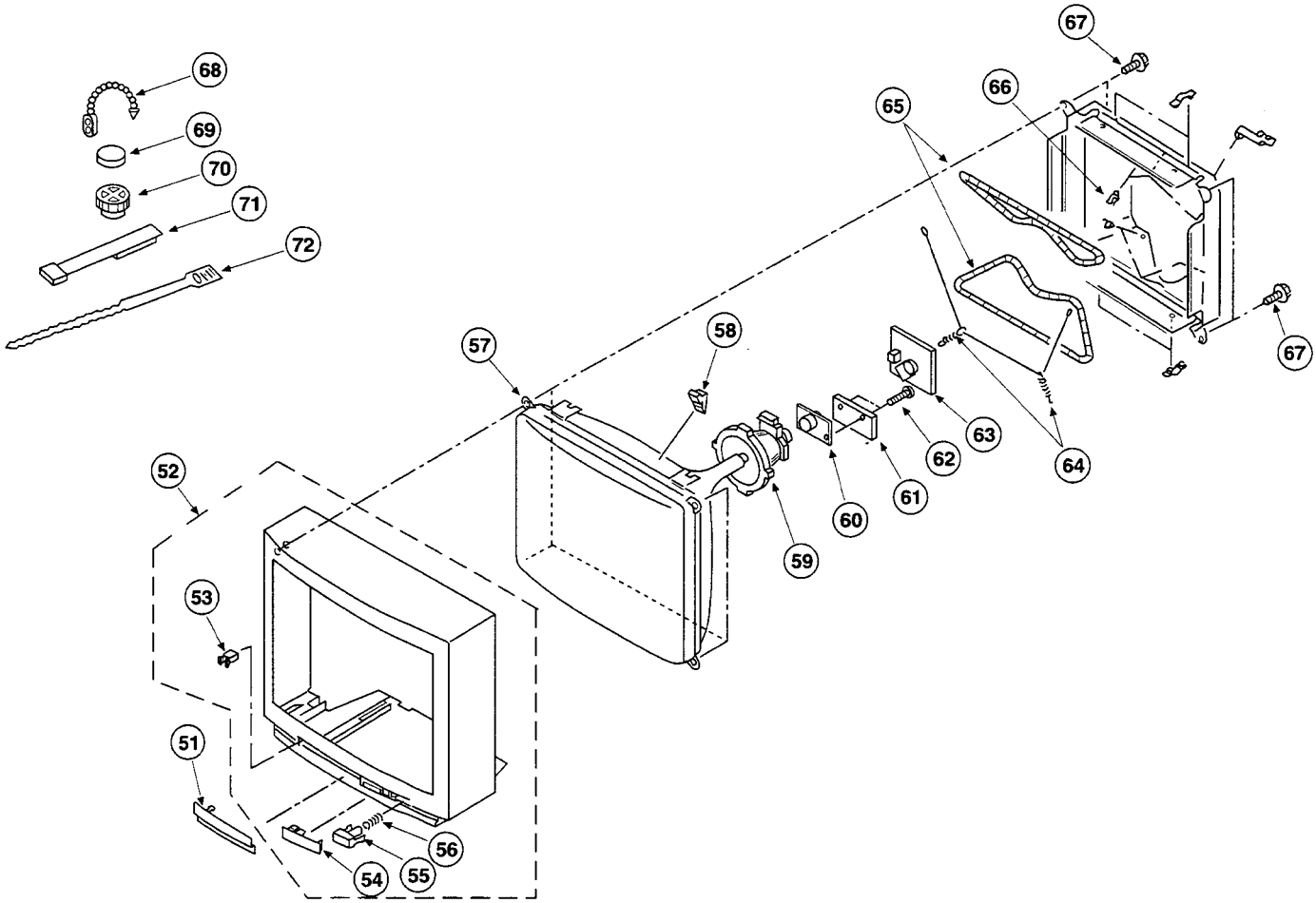
The components identified by shading and marked ! are critical for safety.
Replace only with the part number specified.

## 6-1. CHASSIS




| REF NO | | PART NO | DESCRIPTION | REMARK |
|---|---|---|---|---|
| 1 | | *1-652-275-11 | H1 BOARD | |
| 2 | | *1-652-270-11 | H3 BOARD | |
| 3 | | *1-652-269-11 | H2 BOARD | |
| 4 | ⚠ | 1-571-433-11 | SWITCH, PUSH (AC POWER) | |
| 5 | | *1-652-271-11 | F1 BOARD | |
| 6 | ⚠ | 1-751-680-11 | CORD, POWER (WITH NOISE FILTER) (KV-X2901D/X2901A) | |
| | ⚠ | 1-590-460-11 | CORD, POWER (WITH CONNECTOR) (KV-X2900B/X2901B/X2903E/X2901K) | |
| | ⚠ | 1-590-762-11 | CORD, POWER (WITH PLUG) (KV-X2902U/X2902L) | |
| 7 | | *A-1642-115-A | D BOARD, COMPLETE | |
| 8 | ⚠ | 1-453-169-11 | FBT ASSY (UX1604A2) | |
| 9 | | *A-1632-193-A | A BOARD, COMPLETE (KV-X2901A) | |
| | | *A-1632-196-A | A BOARD, COMPLETE (KV-X2901B) | |
| | | *A-1632-198-A | A BOARD, COMPLETE (KV-X2900B) | |
| | | *A-1632-174-A | A BOARD, COMPLETE (KV-X2901D) | |
| | | *A-1632-194-A | A BOARD, COMPLETE (KV-X2903E) | |
| | | *A-1632-197-A | A BOARD, COMPLETE (KV-X2901K) | |
| | | *A-1632-195-A | A BOARD, COMPLETE (KV-X2902L) | |
| | | *A-1632-199-A | A BOARD, COMPLETE (KV-X2902U) | |
| 10 | | 1-693-185-11 | TUNER (UV916H) (KV-X2900B/X2901B /X2903E/X2901K/X2901D /X2901A/X2902L) | |
| | | 1-693-184-11 | TUNER (U944C) (KV-X2902U) | |
| 11 | | 4-202-713-01 | COVER, REAR | |
| 12 | | 4-039-358-01 | SCREW (4x16), (+) BV TAPPING | |
| 13 | | 1-544-727-11 | SPEAKER (7.5x13CM) | |
| 14 | | X-4200-087-1 | BAFFLE (R) ASSY, BOARD | |
| 15 | | X-4200-088-1 | BAFFLE (L) ASSY, BOARD | |

## 6-2. PICTURE TUBE




The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

| REF NO | PART NO | DESCRIPTION | REMARK |
|---|---|---|---|
| 51 | 4-202-701-01 | DOOR, CONTROL | |
| 52 | X-4200-157-1 | BEZNET ASSY | 53-56 |
| 53 | 4-386-710-11 | CATCHER, PUSH | |
| 54 | 4-202-708-01 | WINDOW, ORNAMENTAL | |
| 55 | 4-202-709-01 | BUTTON, POWER | |
| 56 | 4-329-112-51 | SPRING | |
| 57 | ⚠ 8-733-831-05 | CRT SD-191 (A68JYL61X) | |
| 58 | 3-704-495-01 | SPACER, DY | |
| 59 | ⚠ 8-451-313-61 | DEFLECTION YOLK (Y29FXA) | |
| 60 | ⚠ 1-452-509-41 | NECK ASSY, CRT (NA-308) | |

| REF NO | PART NO | DESCRIPTION | REMARK |
|---|---|---|---|
| 61 | *A-1644-028-A | VM BOARD, COMPLETE | |
| 62 | 4-039-357-01 | SCREW (3x8), (+) BV TAPPING | |
| 63 | *A-1638-046-A | C BOARD, COMPLETE | |
| 64 | 4-369-318-31 | SPRING, TENSION | |
| 65 | ⚠ 1-402-747-21 | COIL, DEGAUSSING | |
| 66 | 4-034-296-01 | HOLDER, DGC | |
| 67 | 4-036-188-01 | SCREW (M), PT | |
| 68 | 4-308-870-00 | CLIP LEAD WIRE | |
| 69 | 1-452-032-00 | MAGNET, DISK; 10MMØ | |
| 70 | 1-452-094-00 | MAGNET, ROTATABLE DISK; 15MMØ | |
| 71 | X-4387-214-1 | PERMALLOY ASSY, CORRECTION | |
| 72 | 3-701-007-00 | BAND BINDING | |

# ELECTRICAL PARTS LIST

## SECTION 7

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS MF : mF, PF : mmF

COILS MMH : mH, μH : mH

F1 A

| REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| | *1-652-271-11 | F1 BOARD | |
| | | ******** | |
| | | < CONNECTOR > | |
| CN603 | ⚠ *1-580-844-11 | PIN, CONNECTOR (POWER) | |
| CN604 | ⚠ *1-695-292-11 | PIN, CONNECTOR (POWER) | |
| | | < FUSE > | |
| F601 | ⚠ 1-576-232-21 | FUSE (H.B.C.) 5A/250V | |
| | ⚠ 1-533-230-11 | HOLDER, FUSE; F601 | |
| | | < SWITCH > | |
| S601 | ⚠ 1-571-433-11 | SWITCH, PUSH (AC POWER) | |
| ********** | | | |
| | *A-1632-174-A | A BOARD, COMPLETE (KV-X2901D) | |
| | | ********** | |
| | *A-1632-193-A | A BOARD, COMPLETE (KV-X2901A) | |
| | | ********** | |
| | *A-1632-198-A | A BOARD, COMPLETE (KV-X2900B) | |
| | | ********** | |
| | *A-1632-196-A | A BOARD, COMPLETE (KV-X2901B) | |
| | | ********** | |
| | *A-1632-194-A | A BOARD, COMPLETE (KV-X2903E) | |
| | | ********** | |
| | *A-1632-199-A | A BOARD, COMPLETE (KV-X2902U) | |
| | | ********** | |
| | *A-1632-195-A | A BOARD, COMPLETE (KV-X2902L) | |
| | | ********** | |
| | *A-1632-197-A | A BOARD, COMPLETE (KV-X2901K) | |
| | | ********** | |
| | | < CAPACITOR > | |
| C1 | 1-163-009-11 | CERAMIC CHIP 0.001MF 10% 50V | |
| C2 | 1-163-009-11 | CERAMIC CHIP 0.001MF 10% 50V | |
| C3 | 1-124-907-11 | ELECT 10MF 20% 50V | |
| C4 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% 25V | |
| C7 | 1-163-009-11 | CERAMIC CHIP 0.001MF 10% 50V | |
| C8 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| C9 | 1-163-009-11 | CERAMIC CHIP 0.001MF 10% 50V | |
| C10 | 1-163-009-11 | CERAMIC CHIP 0.001MF 10% 50V | |
| C11 | 1-163-009-11 | CERAMIC CHIP 0.001MF 10% 50V | |
| C12 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% 25V | |
| C13 | 1-126-101-11 | ELECT 100MF 20% 16V | |
| C16 | 1-163-809-11 | CERAMIC CHIP 0.047MF 10% 25V | |
| C17 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| C18 | 1-163-117-00 | CERAMIC CHIP 100PF 5% 50V | |
| C19 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| C21 | 1-163-037-11 | CERAMIC CHIP 0.022MF 10% 25V | |
| C22 | 1-164-005-11 | CERAMIC CHIP 0.47MF 25V | |
| C23 | 1-163-117-00 | CERAMIC CHIP 100PF 5% 50V | |
| C24 | 1-163-109-00 | CERAMIC CHIP 47PF 5% 50V | |
| C30 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% 25V | |
| C101 | 1-124-916-11 | ELECT 22MF 20% 50V (KV-X2901D/X2901A/X2903E/X2902U X2902L/X2901K) | |
| | 1-124-927-11 | ELECT 4.7MF 20% 50V (KV-X2900B/X2901B) | |
| C102 | 1-124-917-11 | ELECT 33MF 20% 50V | |
| C103 | 1-124-917-11 | ELECT 33MF 20% 50V | |
| C104 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| C105 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% 25V | |
| C106 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| C107 | 1-164-346-11 | CERAMIC CHIP 1MF 16V | |
| C108 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| C109 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| C112 | 1-163-117-00 | CERAMIC CHIP 100PF 5% 50V | |
| C113 | 1-124-477-11 | ELECT 47MF 20% 16V | |
| C114 | 1-164-346-11 | CERAMIC CHIP 1MF 16V | |
| C115 | 1-163-141-00 | CERAMIC CHIP 0.001MF 5% 50V | |
| C117 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% 25V | |
| C118 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% 25V | |
| C119 | 1-163-133-00 | CERAMIC CHIP 470PF 5% 50V | |
| C120 | 1-164-337-11 | CERAMIC CHIP 2.2MF 16V | |
| C121 | 1-124-477-11 | ELECT 47MF 20% 16V | |
| C122 | 1-124-477-11 | ELECT 47MF 20% 16V | |
| C123 | 1-163-090-00 | CERAMIC CHIP 7PF 0.25PF 50V | |
| C124 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| C125 | 1-164-337-11 | CERAMIC CHIP 2.2MF 16V | |
| C126 | 1-164-337-11 | CERAMIC CHIP 2.2MF 16V | |
| C127 | 1-124-917-11 | ELECT 33MF 20% 50V | |
| C128 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| C129 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| C130 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| C131 | 1-124-477-11 | ELECT 47MF 20% 16V | |
| C132 | 1-124-477-11 | ELECT 47MF 20% 16V | |
| C134 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| C135 | 1-124-477-11 | ELECT 47MF 20% 16V | |
| C137 | 1-163-133-00 | CERAMIC CHIP 470PF 5% 50V | |
| C142 | 1-163-133-00 | CERAMIC CHIP 470PF 5% 50V | |

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| REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| C143 | 1-126-101-11 | ELECT 100MF 20% 16V (KV-X2900B/X2901B) | |
| C144 | 1-164-346-11 | CERAMIC CHIP 1MF (KV-X2900B/X2901B) | 16V |
| C145 | 1-163-093-00 | CERAMIC CHIP 10PF 5% | 50V |
| C146 | 1-163-093-00 | CERAMIC CHIP 10PF 5% | 50V |
| C149 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| C150 | 1-124-477-11 | ELECT 47MF 20% | 16V |
| C151 | 1-124-477-11 | ELECT 47MF 20% | 16V |
| C152 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C154 | 1-163-123-00 | CERAMIC CHIP 180PF 5% (KV-X2901D/X2901A/X2903E/X2901K) | 50V |
| | 1-163-121-00 | CERAMIC CHIP 150PF 5% (KV-X2900B/X2901B) | 50V |
| C155 | 1-163-109-00 | CERAMIC CHIP 47PF 5% (KV-X2901D/X2901A/X2903E/X2901K) | 50V |
| | 1-163-105-00 | CERAMIC CHIP 33PF 5% (KV-X2900B/X2901B) | 50V |
| C156 | 1-163-099-00 | CERAMIC CHIP 18PF 5% (KV-X2901D/X2901A/X2903E/X2901K) | 50V |
| C201 | 1-164-005-11 | CERAMIC CHIP 0.47MF | 25V |
| C202 | 1-163-137-00 | CERAMIC CHIP 680PF 5% | 50V |
| C203 | 1-124-907-11 | ELECT 10MF 20% | 50V |
| C204 | 1-164-182-11 | CERAMIC CHIP 0.0033MF 10% | 50V |
| C205 | 1-164-005-11 | CERAMIC CHIP 0.47MF | 25V |
| C206 | 1-164-346-11 | CERAMIC CHIP 1MF | 16V |
| C207 | 1-137-613-11 | FILM 0.0018MF 2% (KV-X2901D/X2901A/X2900B/X2901B X2903E/X2901K) | 100V |
| C208 | 1-164-346-11 | CERAMIC CHIP 1MF | 16V |
| C209 | 1-164-161-11 | CERAMIC CHIP 0.0022MF 10% | 50V |
| C210 | 1-164-005-11 | CERAMIC CHIP 0.47MF | 25V |
| C211 | 1-164-005-11 | CERAMIC CHIP 0.47MF | 25V |
| C212 | 1-164-005-11 | CERAMIC CHIP 0.47MF | 25V |
| C215 | 1-163-023-00 | CERAMIC CHIP 0.015MF 10% | 50V |
| C216 | 1-163-011-11 | CERAMIC CHIP 0.0015MF 10% | 50V |
| C219 | 1-163-023-00 | CERAMIC CHIP 0.015MF 10% | 50V |
| C220 | 1-163-011-11 | CERAMIC CHIP 0.0015MF 10% | 50V |
| C221 | 1-163-037-11 | CERAMIC CHIP 0.022MF 10% | 25V |
| C222 | 1-163-037-11 | CERAMIC CHIP 0.022MF 10% | 25V |
| C225 | 1-130-489-00 | FILM 0.033MF 5% | 50V |
| C226 | 1-130-489-00 | FILM 0.033MF 5% | 50V |
| C227 | 1-163-020-00 | CERAMIC CHIP 0.0082MF 10% | 50V |
| C228 | 1-163-020-00 | CERAMIC CHIP 0.0082MF 10% | 50V |
| C305 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C306 | 1-126-101-11 | ELECT 100MF 20% | 16V |
| C307 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C308 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C309 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C310 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C311 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C312 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C313 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C314 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C315 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C316 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C318 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C320 | 1-124-477-11 | ELECT 47MF 20% | 16V |
| C321 | 1-163-009-11 | CERAMIC CHIP 0.001MF 10% | 50V |
| C322 | 1-163-009-11 | CERAMIC CHIP 0.001MF 10% | 50V |
| C323 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C324 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C325 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C326 | 1-164-161-11 | CERAMIC CHIP 0.0022MF 10% | 50V |
| C327 | 1-136-165-00 | FILM 0.1MF 5% | 50V |
| C328 | 1-164-337-11 | CERAMIC CHIP 2.2MF | 16V |
| C329 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C330 | 1-163-017-00 | CERAMIC CHIP 0.0047MF 10% | 50V |
| C331 | 1-165-320-11 | CERAMIC CHIP 0.47MF 10% | 16V |
| C332 | 1-163-097-00 | CERAMIC CHIP 15PF 5% | 50V |
| C333 | 1-163-097-00 | CERAMIC CHIP 15PF 5% | 50V |
| C334 | 1-163-016-00 | CERAMIC CHIP 0.0039MF 10% | 50V |
| C335 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C336 | 1-126-101-11 | ELECT 100MF 20% | 16V |
| C337 | 1-164-489-11 | CERAMIC CHIP 0.22MF 10% | 16V |
| C338 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C339 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C342 | 1-124-907-11 | ELECT 10MF 20% | 50V |
| C346 | 1-163-133-00 | CERAMIC CHIP 470PF 5% | 50V |
| C347 | 1-163-093-00 | CERAMIC CHIP 10PF 5% | 50V |
| C348 | 1-163-093-00 | CERAMIC CHIP 10PF 5% | 50V |
| C349 | 1-163-093-00 | CERAMIC CHIP 10PF 5% | 50V |
| C350 | 1-165-320-11 | CERAMIC CHIP 0.47MF 10% | 16V |
| C351 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C352 | 1-163-109-00 | CERAMIC CHIP 47PF 5% | 50V |
| C353 | 1-124-477-11 | ELECT 47MF 20% | 16V |
| C355 | 1-163-109-00 | CERAMIC CHIP 47PF 5% | 50V |
| C359 | 1-163-809-11 | CERAMIC CHIP 0.047MF 10% | 25V |
| C361 | 1-124-907-11 | ELECT 10MF 20% | 50V |
| C382 | 1-124-907-11 | ELECT 10MF 20% | 50V |
| C383 | 1-163-101-00 | CERAMIC CHIP 22PF 5% | 50V |
| C401 | 1-124-477-11 | ELECT 47MF 20% | 16V |
| C402 | 1-163-017-00 | CERAMIC CHIP 0.0047MF 10% | 50V |
| C403 | 1-163-017-00 | CERAMIC CHIP 0.0047MF 10% | 50V |
| C404 | 1-124-477-11 | ELECT 47MF 20% | 16V |
| C406 | 1-124-907-11 | ELECT 10MF 20% | 50V |
| C409 | 1-164-005-11 | CERAMIC CHIP 0.47MF | 25V |
| C410 | 1-164-005-11 | CERAMIC CHIP 0.47MF | 25V |
| C411 | 1-124-477-11 | ELECT 47MF 20% | 16V |
| C418 | 1-163-121-00 | CERAMIC CHIP 150PF 5% | 50V |
| C420 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| C421 | 1-124-917-11 | ELECT 33MF 20% | 50V |
| C422 | 1-163-121-00 | CERAMIC CHIP 150PF 5% | 50V |
| C423 | 1-124-477-11 | ELECT 47MF 20% | 16V |
| C425 | 1-163-017-00 | CERAMIC CHIP 0.0047MF 10% | 50V |
| C426 | 1-164-346-11 | CERAMIC CHIP 1MF | 16V |
| C427 | 1-124-477-11 | ELECT 47MF 20% | 16V |
| C428 | 1-164-346-11 | CERAMIC CHIP 1MF | 16V |
| C429 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% | 50V |
| C430 | 1-124-477-11 | ELECT 47MF 20% | 16V |
| C431 | 1-163-017-00 | CERAMIC CHIP 0.0047MF 10% | 50V |
| C432 | 1-124-477-11 | ELECT 47MF 20% | 16V |
| C433 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |
| C434 | 1-164-346-11 | CERAMIC CHIP 1MF | 16V |
| C435 | 1-126-101-11 | ELECT 100MF 20% | 16V |
| C436 | 1-163-133-00 | CERAMIC CHIP 470PF 5% | 50V |
| C437 | 1-164-346-11 | CERAMIC CHIP 1MF | 16V |
| C438 | 1-163-133-00 | CERAMIC CHIP 470PF 5% | 50V |
| C445 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% | 25V |

| REF.NO. | PART NO. | DESCRIPTION | | REMARK |
|---|---|---|---|---|
| | | < C1002 - C1033 FITTED ON > <KV-X2901D/X2901A/X2901B/X2903E> <X2902U/X2902L/X2901K> | | |
| C1002 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1003 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% | 50V |
| C1004 | 1-163-097-00 | CERAMIC CHIP 15PF | 5% | 50V |
| C1005 | 1-163-009-11 | CERAMIC CHIP 0.001MF | 10% | 50V |
| C1007 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% | 50V |
| C1008 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% | 50V |
| C1009 | 1-163-097-00 | CERAMIC CHIP 15PF | 5% | 50V |
| C1011 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% | 50V |
| C1013 | 1-164-346-11 | CERAMIC CHIP 1MF | | 16V |
| C1015 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% | 50V |
| C1016 | 1-163-009-11 | CERAMIC CHIP 0.001MF | 10% | 50V |
| C1018 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1019 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1020 | 1-124-916-11 | ELECT 22MF | 20% | 50V |
| C1021 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1024 | 1-163-009-11 | CERAMIC CHIP 0.001MF | 10% | 50V |
| C1025 | 1-124-477-11 | ELECT 47MF | 20% | 16V |
| C1026 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1027 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1028 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1029 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1030 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1031 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1032 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1033 | 1-124-907-11 | ELECT 10MF | 20% | 50V |
| | | < C1101 - C1137 FITTED ON > <KV-X2903E/X2902U/X2902L> | | |
| C1101 | 1-163-131-00 | CERAMIC CHIP 390PF | 5% | 50V |
| C1102 | 1-163-093-00 | CERAMIC CHIP 10PF | 5% | 50V |
| C1103 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1104 | 1-124-907-11 | ELECT 10MF | 20% | 50V |
| C1105 | 1-124-907-11 | ELECT 10MF | 20% | 50V |
| C1106 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1107 | 1-124-477-11 | ELECT 47MF | 20% | 16V |
| C1108 | 1-124-907-11 | ELECT 10MF | 20% | 50V |
| C1110 | 1-165-320-11 | CERAMIC CHIP 0.47MF | 10% | 16V |
| C1111 | 1-164-489-11 | CERAMIC CHIP 0.22MF | 10% | 16V |
| C1112 | 1-164-489-11 | CERAMIC CHIP 0.22MF | 10% | 16V |
| C1113 | 1-163-137-00 | CERAMIC CHIP 680PF | 5% | 50V |
| C1117 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1118 | 1-124-477-11 | ELECT 47MF | 20% | 16V |
| C1119 | 1-124-477-11 | ELECT 47MF | 20% | 16V |
| C1120 | 1-163-137-00 | CERAMIC CHIP 680PF | 5% | 50V |
| C1122 | 1-124-477-11 | ELECT 47MF | 20% | 16V |
| C1123 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1124 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1125 | 1-165-320-11 | CERAMIC CHIP 0.47MF | 10% | 16V |
| C1126 | 1-163-117-00 | CERAMIC CHIP 100PF | 5% | 50V |
| C1127 | 1-163-117-00 | CERAMIC CHIP 100PF | 5% | 50V |
| C1128 | 1-163-037-11 | CERAMIC CHIP 0.022MF | 10% | 25V |
| C1129 | 1-162-568-11 | CERAMIC CHIP 0.33MF | | 25V |
| C1130 | 1-124-903-11 | ELECT 1MF | 20% | 50V |
| C1131 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1132 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1133 | 1-124-477-11 | ELECT 47MF | 20% | 16V |
| C1134 | 1-124-907-11 | ELECT 10MF | 20% | 50V |
| C1135 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% | 50V |
| C1136 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% | 25V |
| C1137 | 1-163-095-00 | CERAMIC CHIP 12PF | 5% | 50V |
| | | < FILTER > | | |
| CF101 | 0-550-400-00 | EFCV 4045 A4 (KV-X2901D/X2901A/X2900B/X2901B X2903E/X2901K) | | |
| CF102 | 1-404-134-00 | TRAP, CERAMIC (5.5MHZ) (KV-X2901D/X2901A/X2903E/X2901K) | | |
| | 1-409-430-11 | TRAP, CERAMIC (KV-X2900B/X2901B) | | |
| | 1-409-333-00 | TRAP, CERAMIC (6.0MHZ) (KV-X2902U/X2902L) | | |
| CF103 | 0-550-808-10 | SFE 5.5 MC2 (KV-X2901D/X2901A/X2900B/X2901B X2903E/X2901K) | | |
| CF104 | 1-567-101-11 | FILTER, CERAMIC (KV-X2901D/X2901K) | | |
| | 1-567-100-00 | FILTER, CERAMIC (KV-X2900B/X2901B) | | |
| CF106 | 0-550-809-10 | SFE 5.75 MC2 (KV-X2901D/X2901A/X2900B/X2901B X2903E/X2901K) | | |
| SWF101 | 1-579-273-11 | FILTER, SURFACE WAVE | | |
| SWF102 | 1-760-329-11 | FILTER, SURFACE WAVE (KV-X2901D/X2901A/X2903E/X2902U X2902L/X2901K) | | |
| | 1-760-244-11 | FILTER, SURFACE WAVE (KV-X2900B/X2901B) | | |
| | | < CONNECTOR > | | |
| CN001 | 1-695-302-11 | CONNECTOR, BOARD TO BOARD 50P | | |
| CN002 | *1-568-882-51 | PIN, CONNECTOR 7P | | |
| CN003 | *1-568-879-11 | PIN, CONNECTOR 4P | | |
| | | < DIODE > | | |
| D2 | 8-719-421-24 | DIODE MA8039-H | | |
| D6 | 8-719-047-41 | DIODE UMZ12N-T146 | | |
| D7 | 8-719-041-97 | DIODE MA113-TX | | |
| D9 | 8-719-041-97 | DIODE MA113-TX | | |
| D11 | 8-719-041-97 | DIODE MA113-TX | | |
| D101 | 8-719-977-81 | DIODE DTZ338 | | |
| D102 | 8-719-914-43 | DIODE DAN202K-T-147 (KV-X2900B/X2901B) | | |
| D103 | 8-719-914-43 | DIODE DAN202K-T-147 (KV-X2901D/X2900B/X2901B/X2901K) | | |
| D201 | 8-719-800-76 | DIODE DA204K-T-147 (KV-X2901D/X2901A/X2900B/X2901B X2903E/X2901K) | | |
| D301 | 8-719-041-97 | DIODE MA113-TX | | |
| D302 | 8-719-041-97 | DIODE MA113-TX | | |
| D303 | 8-719-041-97 | DIODE MA113-TX | | |
| D304 | 8-719-041-97 | DIODE MA113-TX | | |
| D305 | 8-719-041-97 | DIODE MA113-TX | | |
| D314 | 8-719-047-16 | DIODE BAS216 | | |
| D380 | 8-719-041-97 | DIODE MA113-TX | | |
| D401 | 8-719-047-41 | DIODE UMZ12N-T146 | | |
| D402 | 8-719-047-41 | DIODE UMZ12N-T146 | | |
| D404 | 8-719-047-41 | DIODE UMZ12N-T146 | | |
| D405 | 8-719-047-41 | DIODE UMZ12N-T146 | | |

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| REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| D406 | 8-719-047-41 | DIODE UMZ12N-T146 | |
| D407 | 8-719-047-41 | DIODE UMZ12N-T146 | |
| D408 | 8-719-047-41 | DIODE UMZ12N-T146 | |
| D409 | 8-719-047-41 | DIODE UMZ12N-T146 | |
| D410 | 8-719-047-41 | DIODE UMZ12N-T146 | |
| D411 | 8-719-047-41 | DIODE UMZ12N-T146 | |
| D1002 | 8-719-023-25 | DIODE MA704WK<br>(KV-X2901D/X2901A/X2901B<br>X2903E/X2902U/X2902L/X2901K) | |
| D1003 | 8-719-976-84 | DIODE DTZ3.6A<br>(KV-X2901D/X2901A/X2901B<br>X2903E/X2902U/X2902L/X2901K) | |
| D1101 | 8-719-041-97 | DIODE MA113-TX<br>(KV-X2903E/X2902U/X2902L) | |
| D1102 | 8-719-820-71 | DIODE 1SV214<br>(KV-X2903E/X2902U/X2902L) | |
| | | < IC > | |
| IC001 | 8-752-851-53 | IC CXP85232-SV4839 | |
| IC002 | 8-759-252-11 | IC CAT24C16J-TE13 | |
| IC101 | 8-759-193-14 | IC TDA9814T | |
| IC201 | 8-759-252-14 | IC TDA6612-X-GEG<br>(KV-X2901D/X2901A/X2900B/X2901B<br>X2903E/X2901K) | |
| | 8-759-252-12 | IC TDA6622-X-GEG<br>(KV-X2902U/X2902L) | |
| IC202 | 8-759-514-57 | IC BA7046F | |
| IC301 | 8-759-251-57 | IC TDA8366T | |
| IC302 | 8-759-086-97 | IC TDA4661T/V2 | |
| IC303 | 8-759-251-56 | IC TDA8395T<br>(KV-X2901D/X2900B/X2901B/X2901K) | |
| IC401 | 8-752-069-53 | IC CXA1855Q-T6 | |
| IC1001 | 8-759-252-08 | IC CF72306DW-R<br>(KV-X2901D/X2901A/X2901B<br>X2903E/X2902U/X2902L/X2901K) | |
| IC1002 | 8-759-252-10 | IC CF70200FN-R<br>(KV-X2901D/X2901A/X2901B<br>X2903E/X2902U/X2902L/X2901K) | |
| IC1003 | 8-759-300-71 | IC HD14053BFP<br>(KV-X2901D/X2901A/X2901B<br>X2903E/X2902U/X2902L/X2901K) | |
| IC1101 | 8-759-251-58 | IC SAA7283T<br>(KV-X2903E/X2902U/X2902L) | |
| | | < SOCKET > | |
| J401 | 1-766-296-11 | CONNECTOR, DUAL SCART | |
| | | < COIL > | |
| L1 | 1-412-010-41 | INDUCTOR CHIP 22UH | |
| L101 | 1-408-609-41 | INDUCTOR 33UH | |
| L102 | 1-410-214-31 | INDUCTOR CHIP 68UH | |
| L103 | 1-408-419-00 | INDUCTOR 68UH | |
| L105 | 1-412-008-11 | INDUCTOR CHIP 15UH<br>(KV-X2901D/X2901A/X2903E/X2902U<br>X2902L/X2901K) | |
| | 1-412-005-11 | INDUCTOR CHIP 8.2UH<br>(KV-X2900B/X2901B) | |
| L106 | 1-412-011-31 | INDUCTOR CHIP 27UH | |
| L107 | 1-410-985-11 | INDUCTOR CHIP 0.22UH | |
| L108 | 1-412-008-11 | INDUCTOR CHIP 15UH<br>(KV-X2901D/X2901A/X2903E/X2901K) | |
| | 1-412-011-31 | INDUCTOR CHIP 27UH<br>(KV-X2900B/X2901B) | |
| L109 | 1-410-214-31 | INDUCTOR CHIP 68UH | |
| L110 | 1-412-004-31 | INDUCTOR CHIP 6.8UH | |
| L201 | 1-410-067-21 | INDUCTOR 4.7MMH<br>(KV-X2901D/X2901A/X2900B/X2901B<br>X2903E/X2901K) | |
| L304 | 1-412-006-31 | INDUCTOR CHIP 10UH | |
| L305 | 1-412-006-31 | INDUCTOR CHIP 10UH | |
| L306 | 1-412-006-31 | INDUCTOR CHIP 10UH | |
| L307 | 1-408-609-41 | INDUCTOR 33UH | |
| L308 | 1-408-424-00 | INDUCTOR 180UH | |
| L309 | 1-408-424-00 | INDUCTOR 180UH | |
| L310 | 1-408-407-00 | INDUCTOR 6.8UH | |
| L401 | 1-410-214-31 | INDUCTOR CHIP 68UH | |
| L1001 | 1-408-419-00 | INDUCTOR 68UH<br>(KV-X2901D/X2901A/X2901B<br>X2903E/X2902U/X2902L/X2901K) | |
| L1002 | 1-408-419-00 | INDUCTOR 68UH<br>(KV-X2901D/X2901A/X2901B<br>X2903E/X2902U/X2902L/X2901K) | |
| L1101 | 1-412-004-31 | INDUCTOR CHIP 6.8UH<br>(KV-X2903E/X2902U/X2902L) | |
| T101 | 1-403-686-21 | COIL | |
| | | < TRANSISITOR > | |
| Q4 | 8-729-901-01 | TRANSISTOR DTC144EK | |
| Q5 | 8-729-216-22 | TRANSISTOR 2SA1162-G | |
| Q8 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |
| Q11 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |
| Q12 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |
| Q14 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |
| Q102 | 8-729-104-80 | TRANSISTOR 2SC3355 | |
| Q103 | 8-729-900-53 | TRANSISTOR DTC114EK<br>(KV-X2900B/X2901B) | |
| Q104 | 8-729-900-53 | TRANSISTOR DTC114EK | |
| Q105 | 8-729-900-53 | TRANSISTOR DTC114EK | |
| Q107 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |
| Q108 | 8-729-907-26 | TRANSISTOR IMX1 | |
| Q109 | 8-729-907-26 | TRANSISTOR IMX1 | |
| Q114 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |
| Q116 | 8-729-901-01 | TRANSISTOR DTC144EK<br>(KV-X2901D/X2900B/X2901B/X2901K) | |
| Q117 | 8-729-901-01 | TRANSISTOR DTC144EK<br>(KV-X2901D/X2900B/X2901B/X2901K) | |
| Q120 | 8-729-216-22 | TRANSISTOR 2SA1162-G | |
| Q121 | 8-729-216-22 | TRANSISTOR 2SA1162-G<br>(KV-X2900B/X2901B) | |
| Q123 | 8-729-901-01 | TRANSISTOR DTC144EK | |
| Q124 | 8-729-901-01 | TRANSISTOR DTC144EK | |
| Q125 | 8-729-900-53 | TRANSISTOR DTC114EK<br>(KV-X2900B/X2901B) | |
| Q130 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |
| Q131 | 8-729-216-22 | TRANSISTOR 2SA1162-G | |
| Q132 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |
| Q133 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |
| Q304 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |
| Q312 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |
| Q313 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |

| REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| Q314 | 8-729-900-53 | TRANSISTOR DTC114EK | |
| Q380 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |
| Q381 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |
| Q401 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |
| Q402 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |
| Q403 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |
| Q404 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR | |
| Q1001 | 8-729-920-74 | TRANSISTOR 2SC2412K-QR (KV-X2901D/X2901A/X2901B X2903E/X2902U/X2902L/X2901K) | |
| Q1003 | 8-729-216-22 | TRANSISTOR 2SA1162-G (KV-X2901D/X2901A/X2901B X2903E/X2902U/X2902L/X2901K) | |
| | | < RESISTOR > | |
| JR3 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR8 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR9 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR10 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR12 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR13 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR14 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR15 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR16 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR17 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR18 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR19 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR20 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR22 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR25 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR28 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR53 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR54 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR55 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR56 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR57 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR58 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR59 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR60 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR61 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR62 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR63 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR64 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR65 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR66 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR67 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR68 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR69 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR70 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR71 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR72 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR73 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR74 | 1-216-296-91 | METAL GLAZE 0 5% 1/8W | |
| JR113 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR120 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR122 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W (KV-X2901D/X2901A/X2903E/X2902U X2902L/X2901K) | |
| JR123 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W (KV-X2901D/X2901A/X2903E/X2902U X2902L/X2901K) | |
| JR124 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR125 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W (KV-X2901A/X2903E) | |
| JR126 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR127 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W (KV-X2902L) | |
| JR201 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W (KV-X2901D/X2901A/X2900B/X2901B X2901K) | |
| JR202 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W (KV-X2901D/X2901A/X2900B/X2901B X2901K) | |
| JR401 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W (KV-X2900B) | |
| JR402 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W (KV-X2900B) | |
| JR403 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W (KV-X2900B) | |
| JR408 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| JR1004 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W (KV-X2901D/X2901A/X2901B X2903E/X2902U/X2902L/X2901K) | |
| R21 | 1-216-033-00 | METAL GLAZE 220 5% 1/10W | |
| R24 | 1-216-049-00 | METAL GLAZE 1K 5% 1/10W | |
| R25 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| R26 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | |
| R27 | 1-216-065-00 | METAL GLAZE 4.7K 5% 1/10W | |
| R29 | 1-216-049-00 | METAL GLAZE 1K 5% 1/10W | |
| R31 | 1-216-049-00 | METAL GLAZE 1K 5% 1/10W | |
| R33 | 1-216-063-00 | METAL GLAZE 3.9K 5% 1/10W | |
| R35 | 1-216-065-00 | METAL GLAZE 4.7K 5% 1/10W | |
| R40 | 1-216-045-00 | METAL GLAZE 680 5% 1/10W | |
| R41 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| R43 | 1-216-295-00 | METAL GLAZE 0 5% 1/10W | |
| R44 | 1-216-121-00 | METAL GLAZE 1M 5% 1/10W | |
| R46 | 1-216-049-00 | METAL GLAZE 1K 5% 1/10W | |
| R49 | 1-216-041-00 | METAL GLAZE 470 5% 1/10W | |
| R50 | 1-216-049-00 | METAL GLAZE 1K 5% 1/10W | |
| R59 | 1-216-121-00 | METAL GLAZE 1M 5% 1/10W | |
| R60 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | |
| R61 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | |
| R70 | 1-216-049-00 | METAL GLAZE 1K 5% 1/10W | |
| R71 | 1-216-081-00 | METAL GLAZE 22K 5% 1/10W | |
| R72 | 1-216-081-00 | METAL GLAZE 22K 5% 1/10W | |
| R73 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | |
| R75 | 1-216-081-00 | METAL GLAZE 22K 5% 1/10W | |
| R76 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| R77 | 1-216-065-00 | METAL GLAZE 4.7K 5% 1/10W | |
| R78 | 1-216-037-00 | METAL GLAZE 330 5% 1/10W | |
| R79 | 1-216-065-00 | METAL GLAZE 4.7K 5% 1/10W | |
| R82 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| R83 | 1-216-065-00 | METAL GLAZE 4.7K 5% 1/10W | |
| R84 | 1-216-065-00 | METAL GLAZE 4.7K 5% 1/10W | |
| R85 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | |
| R86 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | |
| R87 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| R88 | 1-216-065-00 | METAL GLAZE 4.7K 5% 1/10W | |
| R89 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| R90 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| R91 | 1-216-049-00 | METAL GLAZE 1K 5% 1/10W | |

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| REF.NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R92 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R93 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R94 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R95 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R96 | 1-216-071-00 | METAL GLAZE | 8.2K | 5% | 1/10W |
| R97 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R99 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R101 | 1-216-081-00 | METAL GLAZE | 22K | 5% | 1/10W |
| R102 | 1-216-083-00 | METAL GLAZE | 27K | 5% | 1/10W |
| R103 | 1-216-077-00 | METAL GLAZE | 15K | 5% | 1/10W |
| R104 | 1-216-073-00 | METAL GLAZE | 10K | 5% | 1/10W |
| R105 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R106 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R107 | 1-216-059-00 | METAL GLAZE | 2.7K | 5% | 1/10W |
| R108 | 1-216-067-00 | METAL GLAZE | 5.6K | 5% | 1/10W |
| R109 | 1-216-176-00 | METAL GLAZE | 120 | 5% | 1/8W |
| R110 | 1-216-057-00 | METAL GLAZE | 2.2K | 5% | 1/10W |
| R111 | 1-216-057-00 | METAL GLAZE | 2.2K | 5% | 1/10W |
| R112 | 1-216-065-00 | METAL GLAZE | 4.7K | 5% | 1/10W |
| R113 | 1-216-073-00 | METAL GLAZE | 10K | 5% | 1/10W |
| R114 | 1-216-073-00 | METAL GLAZE | 10K | 5% | 1/10W |
| R115 | 1-218-755-11 | METAL CHIP | 130K | 0.50% | 1/10W |
| R116 | 1-216-113-00 | METAL GLAZE | 470K | 5% | 1/10W |
| R117 | 1-216-057-00 | METAL GLAZE | 2.2K | 5% | 1/10W |
| R118 | 1-216-107-00 | METAL GLAZE | 270K | 5% | 1/10W |
| R119 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R120 | 1-216-037-00 | METAL GLAZE | 330 | 5% | 1/10W |
| R121 | 1-216-037-00 | METAL GLAZE | 330 | 5% | 1/10W |
| R122 | 1-216-089-91 | METAL GLAZE | 47K | 5% | 1/10W |
| R123 | 1-216-089-91 | METAL GLAZE | 47K | 5% | 1/10W |
| R124 | 1-216-039-00 | METAL GLAZE | 390 | 5% | 1/10W |
| R125 | 1-216-065-00 | METAL GLAZE | 4.7K | 5% | 1/10W |
| R126 | 1-216-065-00 | METAL GLAZE | 4.7K | 5% | 1/10W |
| R127 | 1-216-041-00 | METAL GLAZE | 470 | 5% | 1/10W |
| R128 | 1-216-043-00 | METAL GLAZE | 560 | 5% | 1/10W |
| R130 | 1-216-043-00 | METAL GLAZE | 560 | 5% | 1/10W |
| R131 | 1-216-043-00 | METAL GLAZE | 560 | 5% | 1/10W |
| R134 | 1-216-057-00 | METAL GLAZE | 2.2K | 5% | 1/10W |
| | | (KV-X2901D/X2900B/X2901B/X2901K) | | | |
| R135 | 1-216-057-00 | METAL GLAZE | 2.2K | 5% | 1/10W |
| | | (KV-X2901D/X2900B/X2901B/X2901K) | | | |
| R136 | 1-216-085-00 | METAL GLAZE | 33K | 5% | 1/10W |
| R137 | 1-216-085-00 | METAL GLAZE | 33K | 5% | 1/10W |
| R139 | 1-216-069-00 | METAL GLAZE | 6.8K | 5% | 1/10W |
| R140 | 1-216-093-00 | METAL GLAZE | 68K | 5% | 1/10W |
| R141 | 1-216-069-00 | METAL GLAZE | 6.8K | 5% | 1/10W |
| R142 | 1-216-093-00 | METAL GLAZE | 68K | 5% | 1/10W |
| R143 | 1-216-057-00 | METAL GLAZE | 2.2K | 5% | 1/10W |
| | | (KV-X2901D/X2900B/X2901B/X2901K) | | | |
| R144 | 1-216-059-00 | METAL GLAZE | 2.7K | 5% | 1/10W |
| R145 | 1-216-059-00 | METAL GLAZE | 2.7K | 5% | 1/10W |
| R146 | 1-216-057-00 | METAL GLAZE | 2.2K | 5% | 1/10W |
| R147 | 1-216-035-00 | METAL GLAZE | 270 | 5% | 1/10W |
| | | (KV-X2901D/X2901A/X2903E/X2902U X2902L/X2901K) | | | |
| | 1-216-029-00 | METAL GLAZE | 150 | 5% | 1/10W |
| | | (KV-X2900B/X2901B) | | | |
| R148 | 1-216-057-00 | METAL GLAZE | 2.2K | 5% | 1/10W |
| R149 | 1-216-065-00 | METAL GLAZE | 4.7K | 5% | 1/10W |
| R151 | 1-216-081-00 | METAL GLAZE | 22K | 5% | 1/10W |

| REF.NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R152 | 1-216-023-00 | METAL GLAZE | 82 | 5% | 1/10W |
| R153 | 1-216-057-00 | METAL GLAZE | 2.2K | 5% | 1/10W |
| R154 | 1-216-069-00 | METAL GLAZE | 6.8K | 5% | 1/10W |
| R155 | 1-216-089-91 | METAL GLAZE | 47K | 5% | 1/10W |
| R156 | 1-216-073-00 | METAL GLAZE | 10K | 5% | 1/10W |
| R157 | 1-216-295-00 | METAL GLAZE | 0 | 5% | 1/10W |
| R158 | 1-216-075-00 | METAL GLAZE | 12K | 5% | 1/10W |
| | | (KV-X2901D/X2901A/X2903E/X2901K) | | | |
| R160 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R161 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R162 | 1-216-017-00 | METAL GLAZE | 47 | 5% | 1/10W |
| R163 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R164 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R165 | 1-216-089-91 | METAL GLAZE | 47K | 5% | 1/10W |
| R166 | 1-216-097-00 | METAL GLAZE | 100K | 5% | 1/10W |
| R170 | 1-216-073-00 | METAL GLAZE | 10K | 5% | 1/10W |
| R171 | 1-216-035-00 | METAL GLAZE | 270 | 5% | 1/10W |
| R172 | 1-216-295-00 | METAL GLAZE | 0 | 5% | 1/10W |
| R173 | 1-216-035-00 | METAL GLAZE | 270 | 5% | 1/10W |
| R174 | 1-216-061-00 | METAL GLAZE | 3.3K | 5% | 1/10W |
| R180 | 1-216-295-00 | METAL GLAZE | 0 | 5% | 1/10W |
| R182 | 1-216-073-00 | METAL GLAZE | 10K | 5% | 1/10W |
| R183 | 1-216-067-00 | METAL GLAZE | 5.6K | 5% | 1/10W |
| R185 | 1-216-071-00 | METAL GLAZE | 8.2K | 5% | 1/10W |
| R186 | 1-216-059-00 | METAL GLAZE | 2.7K | 5% | 1/10W |
| R192 | 1-216-033-00 | METAL GLAZE | 220 | 5% | 1/10W |
| R195 | 1-216-113-00 | METAL GLAZE | 470K | 5% | 1/10W |
| R196 | 1-216-013-00 | METAL GLAZE | 33 | 5% | 1/10W |
| R197 | 1-216-037-00 | METAL GLAZE | 330 | 5% | 1/10W |
| R198 | 1-216-017-00 | METAL GLAZE | 47 | 5% | 1/10W |
| R199 | 1-216-037-00 | METAL GLAZE | 330 | 5% | 1/10W |
| | | (KV-X2901D/X2901A/X2903E/X2901K) | | | |
| | 1-216-041-00 | METAL GLAZE | 470 | 5% | 1/10W |
| | | (KV-X2900B/X2901B) | | | |
| R201 | 1-216-053-00 | METAL GLAZE | 1.5K | 5% | 1/10W |
| R202 | 1-216-091-00 | METAL GLAZE | 56K | 5% | 1/10W |
| R203 | 1-216-067-00 | METAL GLAZE | 5.6K | 5% | 1/10W |
| R204 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R205 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R206 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R207 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R210 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R211 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R213 | 1-216-053-00 | METAL GLAZE | 1.5K | 5% | 1/10W |
| R311 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R313 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R314 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R315 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R316 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R317 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R318 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R319 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R320 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R321 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R322 | 1-216-085-00 | METAL GLAZE | 33K | 5% | 1/10W |
| R323 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R325 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R326 | 1-216-077-00 | METAL GLAZE | 15K | 5% | 1/10W |
| R327 | 1-216-097-00 | METAL GLAZE | 100K | 5% | 1/10W |
| R328 | 1-216-295-00 | METAL GLAZE | 0 | 5% | 1/10W |

| REF.NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R329 | 1-216-073-00 | METAL GLAZE | 10K | 5% | 1/10W |
| R330 | 1-216-295-00 | METAL GLAZE | 0 | 5% | 1/10W |
| R331 | 1-216-295-00 | METAL GLAZE | 0 | 5% | 1/10W |
| R332 | 1-216-295-00 | METAL GLAZE | 0 | 5% | 1/10W |
| R333 | 1-216-689-11 | METAL CHIP | 39K | 0.50% | 1/10W |
| R340 | 1-216-097-00 | METAL GLAZE | 100K | 5% | 1/10W |
| R341 | 1-216-083-00 | METAL GLAZE | 27K | 5% | 1/10W |
| R342 | 1-216-073-00 | METAL GLAZE | 10K | 5% | 1/10W |
| R352 | 1-216-123-11 | METAL GLAZE | 1.2M | 5% | 1/10W |
| R354 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R355 | 1-216-065-00 | METAL GLAZE | 4.7K | 5% | 1/10W |
| R356 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R364 | 1-216-041-00 | METAL GLAZE | 470 | 5% | 1/10W |
| R365 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R370 | 1-216-033-00 | METAL GLAZE | 220 | 5% | 1/10W |
| R371 | 1-216-033-00 | METAL GLAZE | 220 | 5% | 1/10W |
| R372 | 1-216-033-00 | METAL GLAZE | 220 | 5% | 1/10W |
| R373 | 1-216-041-00 | METAL GLAZE | 470 | 5% | 1/10W |
| R380 | 1-216-073-00 | METAL GLAZE | 10K | 5% | 1/10W |
| R381 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R382 | 1-216-053-00 | METAL GLAZE | 1.5K | 5% | 1/10W |
| R383 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R384 | 1-216-053-00 | METAL GLAZE | 1.5K | 5% | 1/10W |
| R385 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R386 | 1-216-023-00 | METAL GLAZE | 82 | 5% | 1/10W |
| R387 | 1-216-023-00 | METAL GLAZE | 82 | 5% | 1/10W |
| R388 | 1-216-033-00 | METAL GLAZE | 220 | 5% | 1/10W |
| R389 | 1-216-033-00 | METAL GLAZE | 220 | 5% | 1/10W |
| R390 | 1-216-109-00 | METAL GLAZE | 330K | 5% | 1/10W |
| R392 | 1-216-091-00 | METAL GLAZE | 56K | 5% | 1/10W |
| R393 | 1-216-089-91 | METAL GLAZE | 47K | 5% | 1/10W |
| R401 | 1-216-039-00 | METAL GLAZE | 390 | 5% | 1/10W |
| R402 | 1-216-089-91 | METAL GLAZE | 47K | 5% | 1/10W |
| R403 | 1-216-039-00 | METAL GLAZE | 390 | 5% | 1/10W |
| R404 | 1-216-089-91 | METAL GLAZE | 47K | 5% | 1/10W |
| R405 | 1-216-039-00 | METAL GLAZE | 390 | 5% | 1/10W |
| R406 | 1-216-039-00 | METAL GLAZE | 390 | 5% | 1/10W |
| R408 | 1-216-067-00 | METAL GLAZE | 5.6K | 5% | 1/10W |
| R409 | 1-216-067-00 | METAL GLAZE | 5.6K | 5% | 1/10W |
| R410 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R413 | 1-216-033-00 | METAL GLAZE | 220 | 5% | 1/10W |
| R415 | 1-216-067-00 | METAL GLAZE | 5.6K | 5% | 1/10W |
| R417 | 1-216-033-00 | METAL GLAZE | 220 | 5% | 1/10W |
| R419 | 1-216-067-00 | METAL GLAZE | 5.6K | 5% | 1/10W |
| R420 | 1-216-009-00 | METAL GLAZE | 22 | 5% | 1/10W |
| R421 | 1-216-113-00 | METAL GLAZE | 470K | 5% | 1/10W |
| R422 | 1-216-022-00 | METAL GLAZE | 75 | 5% | 1/10W |
| R423 | 1-216-093-00 | METAL GLAZE | 68K | 5% | 1/10W |
| R424 | 1-216-113-00 | METAL GLAZE | 470K | 5% | 1/10W |
| R425 | 1-216-022-00 | METAL GLAZE | 75 | 5% | 1/10W |
| R426 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R427 | 1-216-188-00 | METAL GLAZE | 390 | 5% | 1/8W |
| R429 | 1-216-067-00 | METAL GLAZE | 5.6K | 5% | 1/10W |
| R430 | 1-216-089-91 | METAL GLAZE | 47K | 5% | 1/10W |
| R431 | 1-216-188-00 | METAL GLAZE | 390 | 5% | 1/8W |
| R432 | 1-216-039-00 | METAL GLAZE | 390 | 5% | 1/10W |
| R433 | 1-216-067-00 | METAL GLAZE | 5.6K | 5% | 1/10W |
| R434 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R435 | 1-216-039-00 | METAL GLAZE | 390 | 5% | 1/10W |
| R436 | 1-216-022-00 | METAL GLAZE | 75 | 5% | 1/10W |
| R437 | 1-216-073-00 | METAL GLAZE | 10K | 5% | 1/10W |
| R438 | 1-216-089-91 | METAL GLAZE | 47K | 5% | 1/10W |
| R439 | 1-216-071-00 | METAL GLAZE | 8.2K | 5% | 1/10W |
| R440 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R441 | 1-216-022-00 | METAL GLAZE | 75 | 5% | 1/10W |
| R442 | 1-216-067-00 | METAL GLAZE | 5.6K | 5% | 1/10W |
| R443 | 1-216-113-00 | METAL GLAZE | 470K | 5% | 1/10W |
| R444 | 1-216-067-00 | METAL GLAZE | 5.6K | 5% | 1/10W |
| R445 | 1-216-113-00 | METAL GLAZE | 470K | 5% | 1/10W |
| R446 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R447 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R448 | 1-216-073-00 | METAL GLAZE | 10K | 5% | 1/10W |
| R449 | 1-216-071-00 | METAL GLAZE | 8.2K | 5% | 1/10W |
| R454 | 1-216-089-91 | METAL GLAZE | 47K | 5% | 1/10W |
| R458 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R461 | 1-216-022-00 | METAL GLAZE | 75 | 5% | 1/10W |
| R464 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R465 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R466 | 1-216-041-00 | METAL GLAZE | 470 | 5% | 1/10W |
| R473 | 1-216-022-00 | METAL GLAZE | 75 | 5% | 1/10W |
| R474 | 1-216-009-00 | METAL GLAZE | 22 | 5% | 1/10W |
| R482 | 1-216-073-00 | METAL GLAZE | 10K | 5% | 1/10W |
| R483 | 1-216-051-00 | METAL GLAZE | 1.2K | 5% | 1/10W |

< R1001 - R1028 FITTED ON >
<KV-X2901D/X2901A/X2901B/X2903E>
<X2902U/X2902L/X2901K>

| | | | | | |
|---|---|---|---|---|---|
| R1001 | 1-216-295-00 | METAL GLAZE | 0 | 5% | 1/10W |
| R1002 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R1004 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R1005 | 1-216-073-00 | METAL GLAZE | 10K | 5% | 1/10W |
| R1008 | 1-216-085-00 | METAL GLAZE | 33K | 5% | 1/10W |
| R1009 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R1010 | 1-216-053-00 | METAL GLAZE | 1.5K | 5% | 1/10W |
| R1011 | 1-216-053-00 | METAL GLAZE | 1.5K | 5% | 1/10W |
| R1012 | 1-216-053-00 | METAL GLAZE | 1.5K | 5% | 1/10W |
| R1014 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R1015 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R1016 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R1019 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R1020 | 1-216-081-00 | METAL GLAZE | 22K | 5% | 1/10W |
| R1021 | 1-216-065-00 | METAL GLAZE | 4.7K | 5% | 1/10W |
| R1023 | 1-216-023-00 | METAL GLAZE | 82 | 5% | 1/10W |
| R1024 | 1-216-023-00 | METAL GLAZE | 82 | 5% | 1/10W |
| R1025 | 1-216-035-00 | METAL GLAZE | 270 | 5% | 1/10W |
| R1026 | 1-216-035-00 | METAL GLAZE | 270 | 5% | 1/10W |
| R1027 | 1-216-035-00 | METAL GLAZE | 270 | 5% | 1/10W |
| R1028 | 1-216-023-00 | METAL GLAZE | 82 | 5% | 1/10W |

< R1101 - R1118 FITTED ON >
<KV-X2903E/X2902U/X2902L>

| | | | | | |
|---|---|---|---|---|---|
| R1101 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W |
| R1102 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R1103 | 1-220-149-11 | METAL GLAZE | 2.2 | 10% | 1/2W |
| R1104 | 1-216-097-00 | METAL GLAZE | 100K | 5% | 1/10W |
| R1105 | 1-216-037-00 | METAL GLAZE | 330 | 5% | 1/10W |
| R1106 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R1107 | 1-216-049-00 | METAL GLAZE | 1K | 5% | 1/10W |
| R1108 | 1-216-121-00 | METAL GLAZE | 1M | 5% | 1/10W |
| R1109 | 1-216-121-00 | METAL GLAZE | 1M | 5% | 1/10W |
| R1110 | 1-220-238-11 | METAL GLAZE | 10 | 5% | 1/4W |

components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

A C

| REF.NO. | PART NO. | DESCRIPTION | | | | REMARK |
|---|---|---|---|---|---|---|
| R1111 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W | |
| R1112 | 1-216-025-00 | METAL GLAZE | 100 | 5% | 1/10W | |
| R1113 | 1-216-117-00 | METAL GLAZE | 680K | 5% | 1/10W | |
| R1114 | 1-216-158-00 | METAL GLAZE | 22 | 5% | 1/8W | |
| R1115 | 1-216-121-00 | METAL GLAZE | 1M | 5% | 1/10W | |
| R1116 | 1-216-081-00 | METAL GLAZE | 22K | 5% | 1/10W | |
| R1117 | 1-216-073-00 | METAL GLAZE | 10K | 5% | 1/10W | |
| R1118 | 1-220-149-11 | METAL GLAZE | 2.2 | 10% | 1/2W | |
| | | < VARIABLE RESISTOR > | | | | |
| RV102 | 1-241-765-11 | RES, ADJ, CARBON 22K (KV-X2900B/X2901B) | | | | |
| | | < RESISTOR NETWORK > | | | | |
| RA1 | 1-236-908-11 | RESISTOR, NETWORK (CHIP TYPE) | | | | |
| RA2 | 1-236-908-11 | RESISTOR, NETWORK (CHIP TYPE) | | | | |
| RA3 | 1-236-908-11 | RESISTOR, NETWORK (CHIP TYPE) | | | | |
| RA7 | 1-236-908-11 | RESISTOR, NETWORK (CHIP TYPE) | | | | |
| RA8 | 1-239-412-11 | NETWORK, RESISTOR (CHIP TYPE) | | | | |
| RA9 | 1-239-412-11 | NETWORK, RESISTOR (CHIP TYPE) | | | | |
| RA10 | 1-236-908-11 | RESISTOR, NETWORK (CHIP TYPE) | | | | |
| RA11 | 1-236-904-11 | RESISTOR, NETWORK (CHIP TYPE) | | | | |
| | | < TUNER > | | | | |
| TU101 | 1-693-185-11 | TUNER UV-916H (KV-X2901D/X2901A/X2900B/X2901B X2903E/X2902L/X2901K) | | | | |
| | 1-693-184-11 | TUNER UV944C (KV-X2902U) | | | | |
| | | < CRYSTAL > | | | | |
| X2 | 1-579-063-21 | VIBRATOR, CERAMIC | | | | |
| X301 | 1-760-331-11 | VIBRATOR, CRYSTAL | | | | |
| X1001 | 1-567-495-11 | OSCILLATOR, CRYSTAL (KV-X2901D/X2901A/X2901B X2903E/X2902U/X2902L/X2901K) | | | | |
| X1101 | 1-579-689-21 | VIBRATOR, CRYSTAL (KV-X2903E/X2902U/X2902L) | | | | |
| ********** | | | | | | |
| | *A-1638-046-A | C BOARD, COMPLETE ********** | | | | |
| | | < CAPACITOR > | | | | |
| C702 | 1-102-824-00 | CERAMIC | 470PF | 5% | 50V | |
| C703 | 1-102-824-00 | CERAMIC | 470PF | 5% | 50V | |
| C704 | 1-102-116-00 | CERAMIC | 680PF | 10% | 50V | |
| C706 | 1-102-116-00 | CERAMIC | 680PF | 10% | 50V | |
| C707 | 1-162-116-00 | CERAMIC | 680PF | 10% | 2KV | |
| C708 | 1-162-114-00 | CERAMIC | 0.0047MF | | 2KV | |
| C709 | 1-102-116-00 | CERAMIC | 680PF | 10% | 50V | |
| C710 | 1-123-947-00 | ELECT | 10MF | 20% | 250V | |
| C712 | 1-102-824-00 | CERAMIC | 470PF | 5% | 50V | |
| C714 | 1-124-360-00 | ELECT | 1000MF | 20% | 16V | |
| C717 | 1-102-114-00 | CERAMIC | 470PF | 10% | 50V | |
| C718 | 1-102-114-00 | CERAMIC | 470PF | 10% | 50V | |
| C719 | 1-102-114-00 | CERAMIC | 470PF | 10% | 50V | |
| | | < CONNECTOR > | | | | |
| CN702 | 1-695-915-11 | TAB (CONTACT) | | | | |
| CN703 | *1-568-882-51 | PIN, CONNECTOR 7P | | | | |

| REF.NO. | PART NO. | DESCRIPTION | | | | REMARK |
|---|---|---|---|---|---|---|
| | | < DIODE > | | | | |
| D701 | 8-719-110-14 | DIODE RD9.1ESB3 | | | | |
| D702 | 8-719-901-33 | DIODE 1SS133 | | | | |
| D706 | 8-719-901-33 | DIODE 1SS133 | | | | |
| D707 | 8-719-901-33 | DIODE 1SS133 | | | | |
| D708 | 8-719-901-33 | DIODE 1SS133 | | | | |
| D709 | 8-719-901-33 | DIODE 1SS133 | | | | |
| D710 | 8-719-901-33 | DIODE 1SS133 | | | | |
| D711 | 8-719-302-43 | DIODE EL1Z | | | | |
| D713 | 8-719-901-33 | DIODE 1SS133 | | | | |
| | | < JACK > | | | | |
| J701 | ⚠ 1-526-990-21 | SOCKET, CRT | | | | |
| | | < COIL > | | | | |
| L704 | 1-408-609-41 | INDUCTOR | 33UH | | | |
| | | < TRANSISTOR > | | | | |
| Q702 | 8-729-173-38 | TRANSISTOR 2SA733-K | | | | |
| Q703 | 8-729-906-70 | TRANSISTOR BF871 | | | | |
| Q704 | 8-729-200-17 | TRANSISTOR 2SA1091-O | | | | |
| Q705 | 8-729-173-38 | TRANSISTOR 2SA733-K | | | | |
| Q706 | 8-729-906-70 | TRANSISTOR BF871 | | | | |
| Q707 | 8-729-200-17 | TRANSISTOR 2SA1091-O | | | | |
| Q708 | 8-729-173-38 | TRANSISTOR 2SA733-K | | | | |
| Q709 | 8-729-906-70 | TRANSISTOR BF871 | | | | |
| Q710 | 8-729-200-17 | TRANSISTOR 2SA1091-O | | | | |
| | | < RESISTOR > | | | | |
| R704 | 1-216-486-00 | METAL OXIDE | 8.2K | 5% | 3W | F |
| R705 | 1-202-824-00 | SOLID | 3.3K | 10% | 1/2W | |
| R706 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | |
| R707 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W | |
| R708 | 1-249-399-11 | CARBON | 33 | 5% | 1/4W | |
| R709 | 1-202-844-00 | SOLID | 330K | 10% | 1/2W | |
| R711 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W | |
| R712 | 1-202-824-00 | SOLID | 3.3K | 10% | 1/2W | |
| R714 | 1-216-486-00 | METAL OXIDE | 8.2K | 5% | 3W | F |
| R715 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R716 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | |
| R717 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W | |
| R718 | 1-202-814-11 | SOLID | 33K | 10% | 1/2W | |
| R719 | 1-249-399-11 | CARBON | 33 | 5% | 1/4W | |
| R720 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W | |
| R722 | 1-202-848-00 | SOLID | 680K | 10% | 1/2W | |
| R723 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R724 | 1-202-846-00 | SOLID | 470K | 10% | 1/2W | |
| R726 | 1-202-824-00 | SOLID | 3.3K | 10% | 1/2W | |
| R727 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | |
| R728 | 1-216-350-11 | METAL OXIDE | 1.2 | 5% | 1W | F |
| R729 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W | |
| R730 | 1-249-399-11 | CARBON | 33 | 5% | 1/4W | |
| R731 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W | |
| R734 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W | |
| R736 | 1-216-486-00 | METAL OXIDE | 8.2K | 5% | 3W | F |
| R739 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R743 | 1-202-842-11 | SOLID | 220K | 10% | 1/2W | |

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

C D

| REF.NO. | | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|---|
| | | | < VARIABLE RESISTOR > | | | |
| RV701 | | 1-230-641-11 | RES, ADJ, METAL GLAZE 2.2M | | | |
| RV702 | | 1-241-656-11 | RES, ADJ, METAL FILM 110M | | | |
| ********** | | | | | | |
| | | *A-1642-115-A | D BOARD, COMPLETE | | | |
| | | | ********** | | | |
| | | 4-201-023-01 | SPACER, INSULATING | | | |
| | | 4-202-373-01 | SPRING, IC | | | |
| | | 4-812-134-00 | RIVET NYLON, 3.5 | | | |
| | | | < CAPACITOR > | | | |
| C502 | | 1-102-824-00 | CERAMIC | 470PF | 5% | 50V |
| C503 | | 1-136-165-00 | FILM | 0.1MF | 5% | 50V |
| C504 | | 1-102-824-00 | CERAMIC | 470PF | 5% | 50V |
| C506 | | 1-124-480-11 | ELECT | 470MF | 20% | 25V |
| C507 | | 1-124-767-00 | ELECT | 2.2MF | 20% | 50V |
| C509 | | 1-136-165-00 | FILM | 0.1MF | 5% | 50V |
| C510 | | 1-124-911-11 | ELECT | 220MF | 20% | 50V |
| C511 | | 1-136-202-11 | FILM | 0.33MF | 5% | 63V |
| C513 | | 1-106-228-00 | MYLAR | 0.22MF | 10% | 100V |
| C514 | | 1-136-165-00 | FILM | 0.1MF | 5% | 50V |
| C515 | | 1-124-480-11 | ELECT | 470MF | 20% | 25V |
| C517 | | 1-124-480-11 | ELECT | 470MF | 20% | 25V |
| C518 | | 1-102-228-00 | CERAMIC | 470PF | 10% | 500V |
| C519 | | 1-102-228-00 | CERAMIC | 470PF | 10% | 500V |
| C520 | | 1-124-480-11 | ELECT | 470MF | 20% | 25V |
| C521 | | 1-124-006-11 | ELECT | 10MF | 20% | 25V |
| C522 | | 1-124-907-11 | ELECT | 10MF | 20% | 50V |
| C600 | ⚠ | 1-161-742-00 | CERAMIC | 0.0022MF | 20% | 400V |
| C601 | ⚠ | 1-161-964-91 | CERAMIC | 0.0047MF | | 250V |
| C602 | ⚠ | 1-161-964-91 | CERAMIC | 0.0047MF | | 250V |
| C603 | | 1-125-318-00 | ELECT(BLOCK) | 220MF | 20% | 400V |
| C604 | | 1-124-122-11 | ELECT | 100MF | 20% | 50V |
| C605 | | 1-124-667-11 | ELECT | 10MF | 20% | 100V |
| C606 | | 1-162-318-11 | CERAMIC | 0.001MF | 10% | 500V |
| C607 | | 1-124-120-11 | ELECT | 220MF | 20% | 25V |
| C608 | | 0-551-803-10 | CAP, 1500PF | | | |
| C611 | | 1-102-228-00 | CERAMIC | 470PF | 10% | 500V |
| C612 | | 1-104-799-11 | ELECT | 22MF | 20% | 100V |
| C613 | | 1-124-347-00 | ELECT | 100MF | 20% | 160V |
| C614 | | 1-126-804-11 | ELECT | 100MF | 20% | 25V |
| C615 | | 1-126-376-11 | ELECT | 470MF | 20% | 25V |
| C616 | | 1-128-386-11 | ELECT | 1000MF | 20% | 25V |
| C617 | | 1-124-556-11 | ELECT | 2200MF | 20% | 16V |
| C618 | | 1-136-165-00 | FILM | 0.1MF | 5% | 50V |
| C619 | | 1-102-228-00 | CERAMIC | 470PF | 10% | 500V |
| C620 | | 1-102-228-00 | CERAMIC | 470PF | 10% | 500V |
| C621 | | 1-136-165-00 | FILM | 0.1MF | 5% | 50V |
| C622 | | 1-124-790-11 | ELECT | 0.47MF | 20% | 100V |
| C623 | | 1-124-120-11 | ELECT | 220MF | 20% | 25V |
| C624 | | 1-136-165-00 | FILM | 0.1MF | 5% | 50V |
| C625 | | 1-124-910-11 | ELECT | 47MF | 20% | 50V |
| C626 | | 1-124-120-11 | ELECT | 220MF | 20% | 25V |
| C627 | | 1-124-120-11 | ELECT | 220MF | 20% | 25V |
| C628 | | 1-124-907-11 | ELECT | 10MF | 20% | 50V |
| C629 | | 1-126-800-51 | ELECT | 2200MF | 20% | 35V |
| C630 | | 1-126-800-51 | ELECT | 2200MF | 20% | 35V |
| C631 | | 1-124-916-11 | ELECT | 22MF | 20% | 50V |
| C632 | | 1-124-120-11 | ELECT | 220MF | 20% | 25V |
| C633 | ⚠ | 1-107-564-11 | FILM | 0.22MF | 20% | 300V |
| C634 | ⚠ | 1-107-564-11 | FILM | 0.22MF | 20% | 300V |
| C635 | ⚠ | 1-107-564-11 | FILM | 0.22MF | 20% | 300V |
| C636 | ⚠ | 1-164-246-51 | CERAMIC | 0.0022MF | 20% | 400V |
| C639 | | 1-136-165-00 | FILM | 0.1MF | 5% | 50V |
| C640 | | 1-106-220-00 | MYLAR | 0.1MF | 10% | 100V |
| C800 | | 1-137-431-11 | FILM | 560PF | 5% | 50V |
| C801 | | 1-136-153-00 | FILM | 0.01MF | 5% | 50V |
| C804 | | 1-136-165-00 | FILM | 0.1MF | 5% | 50V |
| C805 | | 1-106-395-00 | MYLAR | 0.15MF | 10% | 200V |
| C806 | | 1-108-704-11 | MYLAR | 0.1MF | 10% | 200V |
| C807 | | 1-136-540-11 | FILM | 0.82MF | 5% | 200V |
| C810 | | 1-123-944-00 | ELECT | 2.2MF | 20% | 250V |
| C811 | | 1-102-212-00 | CERAMIC | 820PF | 10% | 500V |
| C812 | | 1-136-112-00 | FILM | 1.4MF | 5% | 200V |
| C813 | | 1-129-722-00 | FILM | 0.047MF | 10% | 630V |
| C814 | | 1-136-591-11 | FILM | 0.017MF | 3% | 1.4KV |
| C815 | | 1-136-562-11 | MYLAR | 0.0082MF | 10% | 400V |
| C816 | | 1-161-754-00 | CERAMIC | 0.001MF | 10% | 2KV |
| C817 | | 1-161-754-00 | CERAMIC | 0.001MF | 10% | 2KV |
| C818 | | 1-162-134-11 | CERAMIC | 470PF | 10% | 2KV |
| C819 | | 1-136-208-11 | FILM | 0.068MF | 10% | 250V |
| C820 | | 1-102-114-00 | CERAMIC | 470PF | 10% | 50V |
| C821 | | 1-162-114-00 | CERAMIC | 0.0047MF | | 2KV |
| C822 | | 1-123-948-00 | ELECT | 22MF | 20% | 250V |
| C824 | | 1-123-024-21 | ELECT | 33MF | | 160V |
| C829 | | 1-124-902-00 | ELECT | 0.47MF | 20% | 50V |
| C830 | | 1-124-927-11 | ELECT | 4.7MF | 20% | 50V |
| C832 | | 1-124-903-11 | ELECT | 1MF | 20% | 50V |
| C834 | | 1-126-233-11 | ELECT | 22MF | 20% | 25V |
| C835 | | 1-162-318-11 | CERAMIC | 0.001MF | 10% | 500V |
| C836 | | 1-162-117-00 | CERAMIC | 100PF | 10% | 500V |
| C906 | | 1-124-910-11 | ELECT | 47MF | 20% | 50V |
| C908 | | 1-124-910-11 | ELECT | 47MF | 20% | 50V |
| C909 | | 1-124-903-11 | ELECT | 1MF | 20% | 50V |
| C910 | | 1-137-393-91 | FILM | 0.01MF | 5% | 100V |
| C1200 | | 1-136-165-00 | FILM | 0.1MF | 5% | 50V |
| C1201 | | 1-136-165-00 | FILM | 0.1MF | 5% | 50V |
| C1202 | | 1-136-165-00 | FILM | 0.1MF | 5% | 50V |
| C1203 | | 1-136-169-00 | FILM | 0.22MF | 5% | 50V |
| C1204 | | 1-136-169-00 | FILM | 0.22MF | 5% | 50V |
| C1205 | | 1-101-005-00 | CERAMIC | 0.022MF | | 50V |
| C1206 | | 1-101-005-00 | CERAMIC | 0.022MF | | 50V |
| C1207 | | 1-126-101-11 | ELECT | 100MF | 20% | 16V |
| C1208 | | 1-124-927-11 | ELECT | 4.7MF | 20% | 50V |
| C1209 | | 1-124-927-11 | ELECT | 4.7MF | 20% | 50V |
| C1210 | | 1-124-925-11 | ELECT | 2.2MF | 20% | 50V |
| C1211 | | 1-124-925-11 | ELECT | 2.2MF | 20% | 50V |
| C1212 | | 1-137-387-11 | FILM | 0.001MF | 5% | 100V |
| C1213 | | 1-137-387-11 | FILM | 0.001MF | 5% | 100V |
| C1214 | | 1-126-101-11 | ELECT | 100MF | 20% | 16V |
| C1215 | | 1-136-173-00 | FILM | 0.47MF | 5% | 50V |
| C1216 | | 1-137-366-11 | FILM | 0.0022MF | 5% | 50V |
| C1217 | | 1-137-366-11 | FILM | 0.0022MF | 5% | 50V |
| C1218 | | 1-124-120-11 | ELECT | 220MF | 20% | 16V |
| | | | < CONNECTOR > | | | |
| CN600 | ⚠ | 1-508-786-00 | PIN, CONNECTOR (5MM PITCH) 2P | | | |
| CN601 | ⚠ | 1-508-765-00 | PIN, CONNECTOR (5MM PITCH) 3P | | | |

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

# D

| REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| CN602 ⚠ | *1-695-292-11 | PIN, CONNECTOR (POWER) | |
| CN800 | *1-580-798-11 | CONNECTOR PIN (DY) 6P | |
| CN803 | 1-695-915-11 | TAB (CONTACT) | |
| CN804 | 1-508-768-00 | PIN, CONNECTOR (5MM PITCH) 6P | |
| CN807 | 1-568-878-51 | PIN, CONNECTOR 3P | |
| CN901 | *1-564-519-11 | PLUG, CONNECTOR 4P | |
| CN902 | 1-695-299-11 | CONNECTOR, BOARD TO BOARD 50P | |
| CN1200 | *1-568-879-11 | PIN, CONNECTOR 4P | |
| CN1201 | *1-568-878-51 | PIN, CONNECTOR 3P | |
| | | < DIODE > | |
| D500 | 8-719-109-85 | DIODE RD5.1ESB2 | |
| D502 | 8-719-979-85 | DIODE EGP20G | |
| D503 | 8-719-979-85 | DIODE EGP20G | |
| D504 | 8-719-901-33 | DIODE 1SS133 | |
| D505 | 8-719-982-03 | DIODE MTZJ-3.6A | |
| D506 | 8-719-901-33 | DIODE 1SS133 | |
| D507 | 8-719-109-85 | DIODE RD5.1ESB2 | |
| D600 | 8-719-510-53 | DIODE D4SB60L | |
| D601 | 8-719-046-77 | DIODE EM1-V1 | |
| D603 | 8-719-109-97 | DIODE RD6.8ESB2 | |
| D604 | 8-719-046-75 | DIODE EU-1-V1 | |
| D605 | 8-719-312-61 | DIODE EU-1Z | |
| D606 | 8-719-312-61 | DIODE EU-1Z | |
| D607 | 8-719-046-78 | DIODE EG-1Z-V1 | |
| D608 | 8-719-046-75 | DIODE EU-1-V1 | |
| D609 | 8-719-301-64 | DIODE RU4DS | |
| D610 | 8-719-046-74 | DIODE AU-01Z-V1 | |
| D611 | 8-719-302-43 | DIODE EL1Z | |
| D612 | 8-719-046-76 | DIODE RU-3YX-V1 | |
| D613 | 8-719-302-43 | DIODE EL1Z | |
| D614 | 8-719-302-43 | DIODE EL1Z | |
| D615 | 8-719-046-75 | DIODE EU-1-V1 | |
| D616 | 8-719-110-03 | DIODE RD7.5ESB2 | |
| D617 | 8-719-901-33 | DIODE 1SS133 | |
| D618 | 8-719-901-33 | DIODE 1SS133 | |
| D619 | 8-719-901-33 | DIODE 1SS133 | |
| D620 | 8-719-901-33 | DIODE 1SS133 | |
| D622 | 8-719-921-69 | DIODE MTZJ-9.1 | |
| D625 | 8-719-901-33 | DIODE 1SS133 | |
| D626 | 8-719-046-74 | DIODE AU-01Z-V1 | |
| D800 | 8-719-901-33 | DIODE 1SS133 | |
| D801 | 8-719-901-33 | DIODE 1SS133 | |
| D802 | 8-719-901-33 | DIODE 1SS133 | |
| D803 | 8-719-908-03 | DIODE GP08D | |
| D807 | 8-719-302-43 | DIODE EL1Z | |
| D808 | 8-719-908-03 | DIODE GP08D | |
| D809 | 8-719-018-82 | DIODE RGP02-20EL-6394 | |
| D810 | 8-719-302-43 | DIODE EL1Z | |
| D812 | 8-719-945-80 | DIODE ERC06-15S | |
| D813 | 8-719-945-80 | DIODE ERC06-15S | |
| D814 | 8-719-900-26 | DIODE ERD29-08J | |
| D815 | 8-719-908-03 | DIODE GP08D | |
| D817 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| D902 | 8-719-921-69 | DIODE MTZJ-9.1 | |
| D903 | 8-719-921-69 | DIODE MTZJ-9.1 | |
| D904 | 8-719-921-69 | DIODE MTZJ-9.1 | |
| D905 | 8-719-921-69 | DIODE MTZJ-9.1 | |
| D906 | 8-719-921-69 | DIODE MTZJ-9.1 | |

| REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| | | < FERRITE BEAD > | |
| FB600 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1UH | |
| FB601 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1UH | |
| FB602 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1UH | |
| FB604 | 1-410-396-41 | FERRITE BEAD INDUCTOR 0.45UH | |
| FB605 | 1-410-396-41 | FERRITE BEAD INDUCTOR 0.45UH | |
| FB606 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1UH | |
| | | < IC > | |
| IC500 | 8-759-192-71 | IC STV9379 | |
| IC600 | 8-759-183-88 | IC STR-S6708 | |
| IC601 ⚠ | 8-749-924-93 | IC TLP621GR | |
| IC602 | 8-749-923-26 | IC SE135N-LF12 | |
| IC603 | 8-759-013-06 | IC MC7805CT | |
| IC604 | 8-759-250-63 | IC TL750L05CLP | |
| IC605 | 8-759-701-79 | IC NJM7812FA | |
| IC606 | 8-759-267-25 | IC LM2940T-90 | |
| IC800 | 8-759-103-93 | IC UPC393C | |
| IC1200 | 8-759-250-68 | IC TDA7264 | |
| IC1201 | 8-759-502-21 | IC TDA2822M | |
| | | < COIL > | |
| L502 | 1-412-519-11 | INDUCTOR 3.3UH | |
| L503 | 1-412-519-11 | INDUCTOR 3.3UH | |
| L609 | 1-412-533-21 | INDUCTOR 47UH | |
| L611 | 1-412-533-21 | INDUCTOR 47UH | |
| L612 | 1-414-415-11 | INDUCTOR 0UH | |
| L613 | 1-414-415-11 | INDUCTOR 0UH | |
| L800 | 1-459-087-00 | COIL,HCC DUST CORE 3.9MMH | |
| L801 | 1-459-111-00 | COIL, DRAM CORE (CDI) | |
| L802 | 1-459-104-00 | COIL, WITH CORE | |
| L803 | 1-420-872-00 | COIL, AIR CORE | |
| L804 | 1-459-907-11 | COIL, HORIZONTAL LINEARITY | |
| L805 | 1-412-552-31 | INDUCTOR 2.2MMH | |
| L806 | 1-412-519-11 | INDUCTOR 3.3UH | |
| L809 | 1-412-533-21 | INDUCTOR 47UH | |
| | | < IC LINK > | |
| PS600 ⚠ | 1-532-686-21 | LINK, IC 2.7A (ICP-F75) | |
| PS601 ⚠ | 1-532-686-21 | LINK, IC 2.7A (ICP-F75) | |
| PS602 ⚠ | 1-532-686-21 | LINK, IC 2.7A (ICP-F75) | |
| PS603 ⚠ | 1-532-686-21 | LINK, IC 2.7A (ICP-F75) | |
| PS801 ⚠ | 1-532-605-21 | LINK, IC 0.4A (ICP-F10) | |
| | | < TRANSISTOR > | |
| Q501 | 8-729-119-78 | TRANSISTOR JC501-Q-AMMO | |
| Q502 | 8-729-173-38 | TRANSISTOR 2SA733-K | |
| Q503 | 8-729-900-89 | TRANSISTOR DTC144ES | |
| Q601 | 8-729-025-05 | TRANSISTOR 2SC3852A-O | |
| Q602 | 8-729-320-28 | TRANSISTOR 2SA1667 | |
| Q603 | 8-729-024-35 | TRANSISTOR 2SC2808STP-R | |
| Q604 | 8-729-024-35 | TRANSISTOR 2SC2808STP-R | |
| Q605 | 8-729-119-78 | TRANSISTOR JC501-Q-AMMO | |
| Q606 | 8-729-900-65 | TRANSISTOR DTA144ES | |
| Q607 | 8-729-119-78 | TRANSISTOR JC501-Q-AMMO | |
| Q800 | 8-729-119-78 | TRANSISTOR JC501-Q-AMMO | |
| Q801 | 8-729-017-06 | TRANSISTOR 2SC4793 | |
| Q802 | 8-729-016-32 | TRANSISTOR 2SC4927-01 | |
| Q803 | 8-729-119-80 | TRANSISTOR 2SC2688-LK | |
| Q805 | 8-729-900-89 | TRANSISTOR DTC144ES | |

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

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| REF.NO. | PART NO. | DESCRIPTION | | | | REMARK |
|---|---|---|---|---|---|---|
| Q1200 | 8-729-119-78 | TRANSISTOR JC501-Q-AMMO | | | | |
| | | < RESISTOR > | | | | |
| R500 | 1-215-457-00 | METAL | 33K | 1% | 1/4W | |
| R502 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | |
| R503 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R504 | 1-215-459-00 | METAL | 39K | 1% | 1/4W | |
| R505 | 1-249-382-11 | CARBON | 1.2 | 5% | 1/4W | F |
| R506 | 1-215-447-00 | METAL | 12K | 1% | 1/4W | |
| R507 | 1-215-887-00 | METAL OXIDE | 150 | 5% | 2W | F |
| R508 | 1-216-371-00 | METAL OXIDE | 1.5 | 5% | 2W | F |
| R509 | 1-249-443-11 | CARBON | 0.47 | 5% | 1/4W | F |
| R510 | 1-249-443-11 | CARBON | 0.47 | 5% | 1/4W | F |
| R517 | 1-215-427-00 | METAL | 1.8K | 1% | 1/4W | |
| R518 | 1-215-427-00 | METAL | 1.8K | 1% | 1/4W | |
| R520 | 1-215-457-00 | METAL | 33K | 1% | 1/4W | |
| R521 | 1-215-461-00 | METAL | 47K | 1% | 1/4W | |
| R522 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W | |
| R523 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W | |
| R524 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R525 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R526 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | |
| R527 | 1-215-430-00 | METAL | 2.4K | 1% | 1/4W | |
| R600 | 1-216-490-11 | METAL OXIDE | 39K | 5% | 3W | F |
| R601 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R603 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R604 | 1-249-420-11 | CARBON | 1.8K | 5% | 1/4W | |
| R605 | 1-216-362-11 | METAL OXIDE | 0.27 | 5% | 2W | F |
| R607 | 1-216-421-11 | METAL OXIDE | 12 | 5% | 1W | F |
| R608 | 1-216-365-00 | METAL OXIDE | 0.47 | 5% | 2W | F |
| R610 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R611 | 1-215-859-00 | METAL OXIDE | 22 | 5% | 1W | F |
| R612 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W | |
| R613 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R614 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R615 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W | |
| R616 | 1-215-477-00 | METAL | 220K | 1% | 1/4W | |
| R617 | 1-215-901-00 | METAL OXIDE | 33K | 5% | 2W | F |
| R618 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R619 | 1-216-425-21 | METAL OXIDE | 56 | 5% | 1W | F |
| R620 | 1-247-895-00 | CARBON | 470K | 5% | 1/4W | |
| R621 | 1-216-425-21 | METAL OXIDE | 56 | 5% | 1W | F |
| R622 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R623 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R624 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | F |
| R625 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W | |
| R626 | 1-249-430-11 | CARBON | 12K | 5% | 1/4W | |
| R628 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W | F |
| R629 ⚠ | 1-244-945-91 | CARBON | 1M | 5% | 1/2W | |
| R630 ⚠ | 1-218-265-11 | METAL GLAZE | 8.2M | 5% | 1W | |
| R631 ⚠ | 1-205-949-11 | WIREWOUND | 1.8 | 5% | 10W | |
| R634 | 1-249-397-11 | CARBON | 22 | 5% | 1/4W | F |
| R635 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R636 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R637 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | |
| R638 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W | |
| R639 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R640 | 1-216-381-11 | METAL OXIDE | 0.22 | 5% | 3W | F |
| R641 | 1-216-381-11 | METAL OXIDE | 0.22 | 5% | 3W | F |
| R642 ⚠ | 1-205-949-11 | WIREWOUND | 1.8 | 5% | 10W | |
| R643 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W | |
| R644 | 1-260-087-11 | CARBON | 100 | 5% | 1/2W | |
| R645 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W | |
| R646 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W | F |
| R647 | 1-202-933-61 | FUSIBLE | 0.1 | 10% | 1/2W | F |
| R648 | 1-216-397-11 | METAL OXIDE | 4.7 | 5% | 3W | F |
| R800 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | |
| R801 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R802 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | |
| R803 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W | |
| R804 | 1-249-430-11 | CARBON | 12K | 5% | 1/4W | |
| R805 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R812 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | |
| R813 | 1-215-867-00 | METAL OXIDE | 470 | 5% | 1W | F |
| R814 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |
| R816 | 1-216-481-21 | METAL OXIDE | 1.2K | 5% | 3W | F |
| R817 | 1-216-481-21 | METAL OXIDE | 1.2K | 5% | 3W | F |
| R818 | 1-215-882-00 | METAL OXIDE | 22 | 5% | 2W | F |
| R819 | 1-216-345-11 | METAL OXIDE | 0.47 | 5% | 1W | F |
| R820 | 1-249-403-11 | CARBON | 68 | 5% | 1/4W | |
| R821 | 1-215-884-11 | METAL OXIDE | 47 | 5% | 2W | F |
| R822 | 1-215-868-00 | METAL OXIDE | 680 | 5% | 1W | F |
| R824 | 1-249-420-11 | CARBON | 1.8K | 5% | 1/4W | |
| R826 | 1-247-752-11 | CARBON | 1K | 5% | 1/2W | |
| R827 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R828 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W | |
| R829 | 1-249-493-11 | CARBON | 56K | 5% | 1/2W | |
| R830 | 1-217-778-11 | FUSIBLE | 1K | 5% | 1W | F |
| R833 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | F |
| R836 | 1-249-439-11 | CARBON | 68K | 5% | 1/4W | |
| R837 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | |
| R840 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W | |
| R841 | 1-249-418-11 | CARBON | 1.2K | 5% | 1/4W | |
| R842 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R843 | 1-247-893-11 | CARBON | 390K | 5% | 1/4W | |
| R846 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R847 | 1-247-891-00 | CARBON | 330K | 5% | 1/4W | |
| R848 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W | |
| R849 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R850 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R851 | 1-247-764-11 | CARBON | 10K | 5% | 1/2W | F |
| R852 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W | |
| R901 | 1-202-539-00 | SOLID | 39 | 10% | 1/2W | |
| R902 | 1-202-539-00 | SOLID | 39 | 10% | 1/2W | |
| R907 | 1-247-804-11 | CARBON | 75 | 5% | 1/4W | |
| R916 | 1-249-397-11 | CARBON | 22 | 5% | 1/4W | |
| R917 | 1-249-397-11 | CARBON | 22 | 5% | 1/4W | |
| R1200 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R1201 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W | |
| R1202 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W | F |
| R1203 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | |
| R1204 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | |
| R1205 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W | |
| R1206 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W | |
| R1207 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R1208 | 1-212-849-00 | FUSIBLE | 4.7 | 5% | 1/4W | F |
| R1209 | 1-212-849-00 | FUSIBLE | 4.7 | 5% | 1/4W | F |
| R1210 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R1211 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W | |
| R1212 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W | |

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

# D VM H1

| REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| R1213 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | |
| | | < VARIABLE RESISTOR > | |
| RV301 | 1-238-552-11 | RES, ADJ, CARBON 470K | |
| | | < RELAY > | |
| RY600 ⚠ | 1-515-720-31 | RELAY | |
| | | < SPARK GAP > | |
| SG801 | 1-519-422-11 | GAP, SPARK | |
| | | < TRANSFORMER > | |
| LF600 ⚠ | 1-421-776-11 | LFT | |
| LF601 ⚠ | 1-421-776-11 | LFT | |
| T601 ⚠ | 1-426-805-11 | TRANSFORMER, SRT | |
| T800 | 1-424-545-11 | TRANSFORMER, FERRITE (PMT) | |
| T803 ⚠ | 1-453-169-11 | TRANSFORMER ASSY, FLYBACK (UX-1604A2) | |
| T804 | 1-437-090-00 | HDT | |
| | | < THERMISTOR > | |
| THP600 ⚠ | 1-809-827-11 | THERMISTOR, POSITIVE | |
| ********** | | | |
| | *A-1644-028-A | VM BOARD, COMPLETE | |
| | | ********** | |
| | *4-368-683-21 | SPRING, TRANSISTOR | |
| | | < CAPACITOR > | |
| C1701 | 1-124-119-00 | ELECT 330MF 20% 16V | |
| C1702 | 1-101-880-00 | CERAMIC 47PF 5% 50V | |
| C1703 | 1-102-115-00 | CERAMIC 560PF 10% 50V | |
| C1704 | 1-161-830-00 | CERAMIC 0.0047MF 500V | |
| C1705 | 1-124-120-11 | ELECT 220MF 20% 16V | |
| C1706 | 1-123-935-00 | ELECT 33MF 20% 160V | |
| C1707 | 1-124-907-11 | ELECT 10MF 20% 50V | |
| C1708 | 1-101-006-00 | CERAMIC 0.047MF 50V | |
| C1709 | 1-108-704-11 | MYLAR 0.1MF 10% 200V | |
| C1710 | 1-136-207-11 | FILM 0.047MF 10% 250V | |
| C1711 | 1-162-318-11 | CERAMIC 0.001MF 10% 500V | |
| C1712 | 1-124-799-11 | ELECT 2.2MF 20% 160V | |
| C1713 | 1-162-318-11 | CERAMIC 0.001MF 10% 500V | |
| C1714 | 1-136-207-11 | FILM 0.047MF 10% 250V | |
| C1716 | 1-124-907-11 | ELECT 10MF 20% 50V | |
| C1718 | 1-124-120-11 | ELECT 220MF 20% 16V | |
| C1719 | 1-124-927-11 | ELECT 4.7MF 20% 50V | |
| | | < CONNECTOR > | |
| CN1819 | *1-568-882-51 | PIN, CONNECTOR 7P | |
| | | < DIODE > | |
| D1701 | 8-719-901-33 | DIODE 1SS133 | |
| D1702 | 8-719-901-33 | DIODE 1SS133 | |
| D1703 | 8-719-901-33 | DIODE 1SS133 | |
| D1704 | 8-719-982-37 | DIODE MTZJ-39C | |
| D1705 | 8-719-982-37 | DIODE MTZJ-39C | |
| D1706 | 8-719-901-33 | DIODE 1SS133 | |
| D1707 | 8-719-901-33 | DIODE 1SS133 | |

| REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| | | < COIL > | |
| L1702 | 1-408-418-00 | INDUCTOR 56UH | |
| | | < TRANSISTOR > | |
| Q1701 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q1702 | 8-729-173-38 | TRANSISTOR 2SA733-K | |
| Q1703 | 8-729-017-05 | TRANSISTOR 2SA1837 | |
| Q1704 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q1705 | 8-729-017-06 | TRANSISTOR 2SC4793 | |
| Q1706 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q1707 | 8-729-140-96 | TRANSISTOR 2SD774-34 | |
| Q1708 | 8-729-901-59 | TRANSISTOR BF199 | |
| Q1709 | 8-729-255-12 | TRANSISTOR 2SC2551-O | |
| | | < RESISTOR > | |
| R1701 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R1702 | 1-249-420-11 | CARBON 1.8K 5% 1/4W | |
| R1703 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R1704 | 1-249-420-11 | CARBON 1.8K 5% 1/4W | |
| R1705 | 1-247-736-11 | CARBON 56 5% 1/2W | F |
| R1706 | 1-249-414-11 | CARBON 560 5% 1/4W | F |
| R1707 | 1-249-412-11 | CARBON 390 5% 1/4W | |
| R1709 | 1-249-416-11 | CARBON 820 5% 1/4W | |
| R1710 | 1-249-385-11 | CARBON 2.2 5% 1/4W | F |
| R1711 | 1-249-432-11 | CARBON 18K 5% 1/4W | |
| R1712 | 1-249-435-11 | CARBON 33K 5% 1/4W | |
| R1713 | 1-249-438-11 | CARBON 56K 5% 1/4W | |
| R1714 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R1715 | 1-216-476-11 | METAL OXIDE 180 5% 3W | F |
| R1716 | 1-249-417-11 | CARBON 1K 5% 1/4W | F |
| R1717 | 1-249-432-11 | CARBON 18K 5% 1/4W | |
| R1718 | 1-249-410-11 | CARBON 270 5% 1/4W | |
| R1719 | 1-249-419-11 | CARBON 1.5K 5% 1/4W | |
| R1720 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R1721 | 1-249-414-11 | CARBON 560 5% 1/4W | |
| R1722 | 1-249-385-11 | CARBON 2.2 5% 1/4W | F |
| R1723 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R1724 | 1-249-436-11 | CARBON 39K 5% 1/4W | |
| R1725 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R1726 | 1-249-411-11 | CARBON 330 5% 1/4W | |
| R1727 | 1-249-402-11 | CARBON 56 5% 1/4W | F |
| R1729 | 1-216-451-11 | METAL OXIDE 120 5% 2W | F |
| R1731 | 1-249-420-11 | CARBON 1.8K 5% 1/4W | |
| R1732 | 1-249-426-11 | CARBON 5.6K 5% 1/4W | |
| R1734 | 1-249-419-11 | CARBON 1.5K 5% 1/4W | |
| ********** | | | |
| | *A-1646-057-A | H1 BOARD, COMPLETE | |
| | | ********** | |
| | | < CAPACITOR > | |
| C900 | 1-101-810-00 | CERAMIC 100PF 5% 50V | |
| C901 | 1-101-810-00 | CERAMIC 100PF 5% 50V | |
| C902 | 1-136-205-11 | FILM 0.022MF 10% 40V | |
| C903 | 1-136-205-11 | FILM 0.022MF 10% 40V | |
| C907 | 1-124-903-11 | ELECT 1MF 20% 50V | |
| | | < CONNECTOR > | |
| CN900 | 1-568-678-11 | TERMINAL BLOCK, S 3P | |

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

H1 H2 H3

| REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| | | < JACK > | |
| J900 | 1-562-837-11 | JACK | |
| | | < COIL > | |
| L900 | 1-408-409-00 | INDUCTOR 10UH | |
| L901 | 1-408-409-00 | INDUCTOR 10UH | |
| | | < RESISTOR > | |
| R905 | 1-247-804-11 | CARBON 75 5% 1/4W | |
| R906 | 1-247-804-11 | CARBON 75 5% 1/4W | |
| R909 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| R910 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| R915 | 1-249-397-11 | CARBON 22 5% 1/4W | |
| ********** | | | |
| *1-652-269-11 | H2 BOARD | | |
| | ******** | | |
| | | < CAPACITOR > | |
| C904 | 1-124-910-11 | ELECT 47MF 20% 50V | |
| C905 | 1-124-907-11 | ELECT 10MF 20% 50V | |
| | | < CONNECTOR > | |
| CN907 | 1-564-509-11 | PLUG, CONNECTOR 6P | |
| | | < DIODE > | |
| D901 | 8-719-948-60 | DIODE SLR-54VR3 | |
| | 4-202-707-01 | HOLDER, LED (D901) | |
| | | < IC > | |
| IC900 | 8-741-790-51 | IC SBX1790-51 | |
| | | < RESISTOR > | |
| R900 | 1-249-409-11 | CARBON 220 5% 1/4W | |
| R908 | 1-249-401-11 | CARBON 47 5% 1/4W | |
| ********** | | | |
| *1-652-270-11 | H3 BOARD | | |
| | ******** | | |
| | | < RESISTOR > | |
| R911 | 1-249-423-11 | CARBON 3.3K 5% 1/4W | |
| R912 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R913 | 1-249-423-11 | CARBON 3.3K 5% 1/4W | |
| R914 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| | | < SWITCH > | |
| S900 | 1-692-979-11 | SWITCH, TACTILE | |
| S901 | 1-692-979-11 | SWITCH, TACTILE | |
| S902 | 1-692-979-11 | SWITCH, TACTILE | |
| ********** | | | |

| REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| | | MISCELLANEOUS | |
| | | ********** | |
| ⚠ | 1-402-747-21 | COIL, DEGAUSSING | |
| ⚠ | 8-451-313-61 | DEFLECTION YOLK Y29FXA | |
| | 1-692-979-11 | SPEAKER 7.5 x 13CM | |
| ⚠ | 1-751-680-11 | CORD POWER (WITH NOISE FILTER) | (KV-X2901A/X2901D) |
| ⚠ | 1-590-460-11 | CORD POWER (WITH CONNECTOR) | (KV-X2900B/X2901B/X2903E/X2901K) |
| ⚠ | 1-590-762-11 | CORD POWER (WITH PLUG) | (KV-X2902L/X2902U) |
| V901 ⚠ | 8-733-831-05 | PICTURE TUBE SD-191 (A68JYL61X) | |
| ********** | | | |
| | | ACCESSORIES AND PACKING MATERIALS | |
| | | ********** | |
| | 4-202-699-11 | MANUAL INSTRUCTION (GERMAN/ENGLISH/DUTCH/GREEK) | |
| | 4-202-699-41 | MANUAL INSTRUCTION (ITALIAN) | |
| | 4-202-699-51 | MANUAL INSTRUCTION (FRENCH | |
| | 4-202-699-61 | MANUAL INSTRUCTION (ENGLISH) | |
| | 4-202-699-71 | MANUAL INSTRUCTION (SPANISH) | |
| | 4-202-699-81 | MANUAL INSTRUCTION (GERMAN/DANISH/FRENCH/NORWEGIAN) (DUTCH/PORTUGUESE/SWEDISH/FINNISH) | |
| | 4-202-699-91 | MANUAL INSTRUCTION (HUNGARIAN/CZECH/POLISH/RUSSIAN) (BULGARIAN) | |
| | *1-692-979-11 | BAG, PROTECTION | |
| | *1-692-979-11 | CUSHION (UPPER) (ASSY) | |
| | *1-751-680-11 | CUSHION (LOWER) (ASSY) | |
| | *1-590-762-11 | INDIVIDUAL CARTON | |
| | | REMOTE COMMANDER | |
| | | ********** | |
| | 1-467-706-11 | COMMANDER (RM833) | |
| ********** | | | |

7296

# SERVICE MANUAL

# BE-3B CHASSIS

| MODEL | COMMANDER | DEST. | CHASSIS NO. | MODEL | COMMANDER | DEST. | CHASSIS NO. |
|---|---|---|---|---|---|---|---|
| KV-X2901D | RM-833 | AEP | SCC-G77B-A | KV-X2903E | RM-833 | Spanish | SCC-G82B-A |
| KV-X2901A | RM-833 | Italian | SCC-G81B-A | KV-X2902L | RM-833 | IRISH | SCC-G83B-A |
| KV-X2900B | RM-833 | French | SCC-G85B-A | KV-X2902U | RM-833 | UK | SCC-G87B-A |
| KV-X2901B | RM-833 | French | SCC-G84B-A | KV-X2901K | RM-833 | OIRT | SCC-G86A-A |

# CORRECTION - 1

SUBJECT: CORRECTED SPECIFICATIONS

File this correction with the service manual

**(See page 2)**

**Incorrect**

| ITEM MODEL | Television System | Stereo System | Channel Coverage | Color System |
|---|---|---|---|---|
| AEP | B/G/H, D/K | GERMAN Stereo | PAL B/G/H VHF:E2-E12 UHF:E21-E69<br>CABLE TV (1):S1-S41<br>CABLE TV (2):S01-S05, M1-M10, U1-U10<br>ITALIA VHF:A-H2 (C) UHF:21-69<br>D/K VHF:R01-R12 UHF:R21-R69 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| Italian | B/G/H, D/K | GERMAN Stereo | ITALIA VHF:A-H2 (C) UHF: 21-69 PAL<br>B/G/H VHF:E2-E12 UHF:E21-E69<br>CABLE TV (1):S1-S41<br>CABLE TV (2):S01-S05, M1-M10, U1-U10<br>D/K VHF:R01-R12 UHF:R21-R69 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| French | B/G/H, D/K L, I | GERMAN Stereo | L VHF:F02-F10 UHF:F21-F60<br>CABLE:B-Q B/G/H VHF:E2-E12<br>UHF:E21-E69<br>CABLE TV (1):S1-S41<br>CABLE TV (2):S01-S05, M1-M10, U1-U10<br>ITALIA VHF:A-H2 (C) UHF:21-69<br>I UHF:B21-B69 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| Spanish | B/G/H, D/K | GERMAN/NICAM Stereo | PAL B/G VHF:E2-E12 UHF:E21-E69<br>CABLE TV (1):S1-S41<br>CABLE TV (2):S01-S05, M1-M10, U1-U10<br>ITALIA VHF:A-H2 (C) UHF:21-69<br>D/K VHF:R01-R12 UHF:R21-R69 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| Irish | I | NICAM Stereo | VHF A-C, D-J, VHF 21-69<br>CABLE CHANNELS S1-S20<br>HYPERBAND S21-S41 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| UK | I | NICAM Stereo | UHF : B21-B69 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| OIRT | B/G/H, D/K | GERMAN Stereo | B/G/H VHF:E2-E12 UHF:E21-E69<br>CABLE TV (1):S1-S41<br>D/K VHF:R01-R12 UHF:R21-R69 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |

**Correct**

| ITEM MODEL | Television System | Stereo System | Channel Coverage | Color System |
|---|---|---|---|---|
| AEP | B/G/H, D/K | GERMAN Stereo | PAL B/G/H VHF:E2-E12 UHF:E21-E69<br>CABLE TV (1):S1-S41<br>CABLE TV (2):S01-S05, M1-M10, U1-U10<br>ITALIA VHF:A-H2 (C) UHF:21-69<br>D/K VHF:R01-R12 UHF:R21-R69 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| Italian | B/G/H | GERMAN Stereo | ITALIA VHF:A-H2 (C) UHF: 21-69 PAL<br>B/G/H VHF:E2-E12 UHF:E21-E69<br>CABLE TV (1):S1-S41<br>CABLE TV (2):S01-S05, M1-M10, U1-U10 | PAL<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| French | B/G/H, L, I | KV-X2501B<br>GERMAN Stereo<br><br>KV-X2500B<br>GERMAN/NICAM<br>Stereo | L VHF:F02-F10 UHF:F21-F60<br>CABLE:B-Q B/G/H VHF:E2-E12<br>UHF:E21-E69<br>CABLE TV (1):S1-S41<br>CABLE TV (2):S01-S05, M1-M10, U1-U10<br>ITALIA VHF:A-H2 (C) UHF:21-69<br>I UHF:B21-B69 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| Spanish | B/G/H, | GERMAN/NICAM Stereo | PAL B/G VHF:E2-E12 UHF:E21-E69<br>CABLE TV (1):S1-S41<br>CABLE TV (2):S01-S05, M1-M10, U1-U10<br>ITALIA VHF:A-H2 (C) UHF:21-69 | PAL<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| Irish | I | NICAM Stereo | VHF A-C, D-J, UHF 21-69<br>CABLE CHANNELS S1-S20 (C)<br>HYPERBAND S21-S41 | PAL<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| UK | I | NICAM Stereo | UHF : B21-B69 | PAL<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| OIRT | B/G/H, D/K | GERMAN Stereo | B/G/H VHF:E2-E12 UHF:E21-E69<br>CABLE TV (1):S1-S41<br>D/K VHF:R01-R12 UHF:R21-R69 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |

MICROFILM

9-974-850-91

**Sony Corporation**
**Consumer A & V Products Company**
**TV & Display Products Div.**

**English**
94FP7169-1
Printed in U.K.
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SONY

# SERVICE MANUAL

# BE-3B CHASSIS

| MODEL | COMMANDER | DEST. | CHASSIS NO. | MODEL | COMMANDER | DEST. | CHASSIS NO. |
|---|---|---|---|---|---|---|---|
| KV-X2901D | RM-833 | AEP | SCC-G77B-A | KV-X2903E | RM-833 | Spanish | SCC-G82B-A |
| KV-X2901A | RM-833 | Italian | SCC-G81B-A | KV-X2902L | RM-833 | IRISH | SCC-G83B-A |
| KV-X2900B | RM-833 | French | SCC-G85B-A | KV-X2902U | RM-833 | UK | SCC-G87B-A |
| KV-X2901B | RM-833 | French | SCC-G84B-A | KV-X2901K | RM-833 | OIRT | SCC-G86A-A |

# CORRECTION - 2

**SUBJECT: CORRECTED PART NUMBERS**

**File this correction with the service manual**

**INTRODUCTION** : 1. ALL MODELS.
2. ALL MODELS.
3. KV-X2901D/X2901A/X2900B/X2901B/X2903E/X290IK only.

☛ :Indicates corrected portion.

## SECTION 6 EXPLODED VIEWS

6-2.PICTURE TUBE (See page 58)

**Item 1**

| INCORRECT | | | | CORRECT | | | |
|---|---|---|---|---|---|---|---|
| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
| 53 | 4-386-710-11 | CATCHER, PUSH | | 53 | 4-392-036-11 | CATCHER, PUSH | |

## SECTION 6 EXPLODED VIEWS, SECTION 7 ELECTRICAL PARTS LIST

6-1 CHASSIS (See page 57), F1 BOARD (See page 59), H2/H3 boards (See page 71)

**Item 2**

| INCORRECT | | | | CORRECT | | | |
|---|---|---|---|---|---|---|---|
| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
| | *1-652-270-11 | H3 BOARD<br>******** | | | *A-1646-059-A | H3 BOARD, COMPLETE<br>********** | |
| | *1-652-269-11 | H2 BOARD<br>******** | | | *A-1646-058-A | H2 BOARD, COMPLETE<br>********** | |
| | *1-652-271-11 | F1 BOARD<br>******** | | | *A-1624-029-A | F1 BOARD, COMPLETE<br>********** | |

## SECTION 7 ELECTRICAL PARTS LIST

A BOARD (See page 61)

**Item 3**

| INCORRECT | | | | CORRECT | | | |
|---|---|---|---|---|---|---|---|
| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
| CF101 | 0-550-400-00 | EFCV 4045 A4 | | CF101 | 1-760-154-21 | EFCV 4045 A4 | |
| CF103 | 0-550-808-10 | SFE 5.5MC2 | | CF103 | 1-760-106-21 | SFE 5.5MC2 | |
| CF106 | 0-550-809-10 | SFE 5.75MC2 | | CF106 | 1-760-107-21 | SFE 5.75MC2 | |

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9-974-850-92

**Sony Corporation**
**Consumer A & V Products Company**
**TV & Display Products Div.**

**English**
95EP7169-1
Printed in U.K.
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